

MUNICIPAL INFRASTRUCTURE AND IDP HOUSING REHABILITATION PROJECT

ANNUAL WORK PLAN (FY 2012/13)

CONTRACT: AID-EDH-I-00-08-00027-00, TASK ORDER: AID-114-TO-11-00002

1 September 2012; Revised 10 October 2012

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10 October 2012

Mr. Bradley Carr Water Irrigation and Infrastructure Advisor Office of Economic Growth US Agency for International Development 11 George Balanchine Street Tbilisi, 0131 Georgia

Re: Annual Work Plan (FY 2012/13) for the Municipal Infrastructure and IDP Housing Rehabilitation Project.

Dear Mr. Carr:

This report is being submitted to you in accordance with the requirements of task order no. AID-II4-TO-II-00002 of contract AID-EDH-I-00-08-00027-00. It provides Tetra Tech's Final Annual Work Plan (FY 2012/13) for the Municipal Infrastructure and IDP Housing Rehabilitation

We look forward to your review and welcome your comments and suggestions.

Very truly yours,

Jeffrey W. Fredericks, P.E., PhD

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Chief of Party Tetra Tech, Inc.

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CC:USAID (George Kokochashvili); MDF (Kartlos Gviniashvili); Tetra Tech (Firouz Rooyani, Dean White, Brian Potvin, Ilia Eloshvili, Document Control Center)

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ACRONYMS

BD Bid Document BOQ Bill of Quantities

CC Internally Displaced Persons Durable Housing Collective Center

CCN Cooperating Country National
CFR Code of Federal Regulations
CO USAID Contracts Office

COP Chief Of Party

COR USAID Task Order Cognizant Technical Officer

DB Design-Build DBB Design-Bid-Build

DCC Document Control Center
DCOP Deputy Chief Of Party
DRC Danish Refugee Council
EA Environmental Assessment
EC European Commission

EIA Environmental Impact Assessment

EOI Expression of Interest

EPI Economic Prosperity Initiative USAID Project

ESS Environmental Scoping Statement

GEL Georgian Lari Geo Geo Ltd

GMIP Municipal Infrastructure and IDP Housing Rehabilitation Project (the project)

GoG Government of Georgia

GWUC Georgian Water Utility Company

HO Home Office

IDP Internally Displaced Persons

IFB Invitation for Bid
IL Implementing Letters
Kav Kavgiprotransi-Mg Ltd

GWUC Georgian Water Utility Company LTTA Long Term Technical Assistance MDF Municipal Development Fund

MOA Ministry of Agriculture
MRA Ministry of Refugee Affairs

MRDI Ministry of Regional Development and Infrastructure NEO New Economic Opportunities (USAID Project)

NGO Non-Government Organization

NTP Notification to Proceed

OSCE Organization for the Security and Co-operation of Europe

PEA Programmatic Environmental Assessment

PMC Project Management Committee
PMP Performance Monitoring Plan
QA/QC Quality Assurance/Quality Control

RFP Request for Proposal SOW Scope of Work

STTA Short Term Technical Assistance

TBD To Be Determined

Tt Tetra Tech

UNHCR United Nations High Commissioner for Refugees
USAID United States Agency For International Development

USG U.S. Government WB World Bank

I. EXECUTIVE SUMMARY

Under the United States Agency for International Development (USAID)/ Caucasus – Municipal Infrastructure and IDP Housing Rehabilitation Project (GMIP) Contract No. AID-EDH-I-00-08-00027-00 Order No: AID-II4-TO-I I-00002, Tetra Tech (Tt) is responsible for providing support to monitor current processes and practices, identify and mitigate areas of risk, and carry out oversight and quality control efforts to ensure that selected municipal and Internally Displaced Persons (IDP) infrastructure projects are implemented effectively and in accordance with U.S. and Georgian standards and regulations. The period of performance for the Tetra Tech Task Order is May 23, 2011– November 22, 2013.

The purpose of this report is to present the Tetra Tech Annual Work Plan (FY 2012/13). This report details the work to be accomplished during the upcoming year for the period from 1 October 2012 to 30 September 2013.

The USAID/Georgia Municipal Infrastructure and IDP Housing Rehabilitation Project (GMIP) has three components: Component I, Municipal Infrastructure (\$9.57 million); Component 2, Rehabilitation of Irrigation Infrastructure (\$8.16 million); and Component 3, IDP Durable Housing (\$34.67 million). The GMIP has a number of cooperating partners. The primary partners implementing the project on day-to-day basis are USAID/Georgia (USAID), Government of Georgia Municipal Development Fund (MDF), Tetra Tech (Tt), and the MDF feasibility, design, and construction contractors.

Projects selected by USAID and GOG include 5 municipal infrastructure sub-projects (roads and water supply) in 5 municipalities; an irrigation project covering two major schemes totaling 18,000 ha with over 100 km of canals; water supply and sanitary upgrades for 11 cottage settlements (2000 cottages), and rehabilitation of 46 IDP buildings & 2,100 apartments located in 5 regions requiring more than 11 construction contracts in multiple locations throughout Georgia.

TetraTech is responsible for providing USAID/Georgia and its implementing partners under the GMIP (Table I) immediate access to a team of full-time and short-term technical assistance that includes all related fields of expertise required for successful oversight of implementation of Components I, 2, and 3 of the Task Order. This expertise includes procurement management, engineering, environmental science, construction management, monitoring and inspection, and technical training. In addition to providing oversight for implementation of MDF's USAID-funded infrastructure projects, Tetra Tech is responsible for strengthening the capacity of MDF and project recipients to help ensure long-term sustainability of project interventions.

The major project phases/activities of the work plan include project selection (completed), environmental clearances (on-going), procurement (on-going), design/construction (on-going), and capacity building (on-going). The scope of work over the next year (FY 2102/13) includes oversight and monitoring of four on-going procurements totaling USD 20 million and 15 future procurements totaling USD 31million, design reviews for 4 on-going contracts and 13 future contracts involving design, design-build, and construction (design changes & as-built drawings) of multiple sub-projects (Table 8), and construction management and over site for four on-going contracts and 7 future construction contracts.

A project schedule has been developed in MS Project (Annex I) to present graphically the details of the proposed implementation plan and the timelines for the implementation of different tasks, reporting, and planning activities. The schedule shows that three construction contracts, totaling over USD 20 million, are expected to extend beyond January I, 2014, the end of project date (22 November 2013) for the Tetra Tech Task order.

The Tetra Tech main project office is located in Tbilisi adjacent to MDF. Day-to-day project activities are managed from this office. A regional office was opened in Kutaisi in March 2012.

TetraTech is providing a team of full-time (LTTA) and short-term (STTA) technical assistance that includes all related fields of expertise. The estimated level of Effort for Year 2 (Oct 12 – Sept 13) is shown below:

HO	LTTA	(da)	STTA (da)		Total
Support (da)	Expat	CCN	Expat	CCN	(da)
123	260	2,485	180	242	3,290

A GMIP Gap Analysis was carried out in May 2012. It recommended additional Tetra Tech staffing support to include local project engineers, an additional LTTA expatriate construction engineer (or if funds not available support the project with regular expat and local STTA), and additional office space and vehicles. An additional local STTA roads engineer was hired. Sufficient funds are not available to hire an additional LTTA expatriate.

Budget realignment was prepared and submitted to USAID in September 2012. A restructuring of the budget was required to readjust for level of effort in certain categories not anticipated in the original budget. This includes an increase in over 160 days of environmental expat STTA required to assist with clearance of 10 separate environmental actions (Table 4), considerably more than anticipated in the original work plan. Although the actual Year I budget (Jun 2011- May 2012) was 2% less than the original budget, to meet current project needs and project requirements for Year 2 (June 12 – May 13) it is necessary to increase the Year 2 budget to USD 1,992,846 with an average monthly burn rate of USD 166,000 or 6% increase over the original budget To account for increases in the Year 2 budget, the proposed Year 3 (Jun 13 – Nov 13) budget was reduced 9% from the original. Implementation of the realigned budget will require a reduction in staff beginning in January 2013 and allows for only a minimum staff for the last four months (Aug-Nov 13) of the Task Order.

2. INTRODUCTION AND PROGRAM OVERVIEW

2.1 Authorization

Under the United States Agency for International Development (USAID)/ Caucasus – Municipal Infrastructure and IDP Housing Rehabilitation Project (GMIP) Contract No. AID-EDH-I-00-08-00027-00 Order No: AID-I14-TO-I I-00002, Tetra Tech (Tt) is responsible for providing support to monitor current processes and practices, identify and mitigate areas of risk, and carry out oversight and quality control efforts to ensure that selected municipal and Internally Displaced Persons (IDP) infrastructure projects are implemented effectively and in accordance with U.S. and Georgian standards and regulations.

The period of performance for the contract is May 23, 2011 – November 22, 2013.

2.2 Purpose of Report

The purpose of this report is to present the Annual Work Plan (FY 2012/13). This report details the work to be accomplished during the upcoming year for the period from 1 October 2012 to 30 September 2013.

The work plan has separate sections for each of the three components of the SOW and includes task items such as start/completion dates, work activities, long-term and medium/short-term personnel needs, procurement planning, etc. It includes a description of the management structure, proposed schedule, work flow and overall program approach.

Per contract the work plan includes a staffing plan detailing required short term personnel and other outside technical support; planning, engineering and administrative oversight, capacity building, monitoring and evaluation, and other technical services. The work plan has been developed in consultation with USAID/Georgia and MDF. It includes implementation sequencing, time line estimates, and critical paths. The work plan was developed based consultation with USAID/Georgia and Municipal Development Fund (MDF) counterparts.

This Work Plan is designed to be responsive to the logistical and administrative challenges posed by concurrently implementing a wide range and types of subprojects, from roads, flood protection works, domestic water supply and irrigation systems to the rehabilitation of IDP apartment buildings and improved water supply and sanitation for IDP cottage communities. The subprojects are situated over a fairly wide area of Georgia, and travelling from one to another can take several hours by road. There are works for:

- Rehabilitation of 46 IDP apartment buildings & 2,100 apartments located in 5 regions
- Water supply and sanitary upgrades for 11 cottage settlements (2000 cottages) in 2 regions and 5 districts
- Infrastructure improvement projects in 5 municipalities involving
 - o 35 km of road repair for over 75 streets & roads
 - o Internal water supply hook-ups for 122 buildings & 3,765 apartments
 - o 1,500 m river bank protection works
 - Water supply treatment facility upgrade for 2000 persons
- Irrigation rehabilitation in two large schemes with over 100 km of canals.

The work plan has separate sections presenting the i) Management Approach; ii) Project Work Program; iii) Project Schedule iv) Tetra Tech Staffing Plan; iv) Tetra Tech Oversight and Monitoring Plan; and v) Reports and Deliverables. The Project Schedule and List of Tetra Tech Key Personnel are provided as annexes.

Per contract this annual work plan may be revised on an occasional basis, as needed, to reflect project changes on the ground and with the concurrence of the COR.

2.3 Background

The dual shocks of Georgia's August 2008 conflict with Russia and the global economic downturn posed serious challenges to Georgia's economic stability. This in turn put pressure on Georgia's political stability. The conflict, crisis, and subsequent slowdown in economic growth and foreign direct investment have placed a severe strain on Georgia's national budget and its ability to finance core investments in critical regional development initiatives. Many years of decline in the quality, coverage and maintenance of basic services, including water supply, sewage, local roads, solid waste services, and irrigation systems have dramatically reduced Georgia's quality of life in rural areas and constrained private sector growth. Such degradation and instances of conflict-related damage have resulted in significant constraints to the productive capacity and quality of life of thousands of Georgians, including old and new IDPs, rural poor, and persons directly or indirectly affected by the 2008 conflict with Russia.

2.4 Project Objectives

The major purpose of this project is to improve the infrastructure in five selected municipalities - Dusheti, Mtskheta, Gori, Kareli, and Oni, affected during Russian Georgian conflict in 2008 and improve living standards for nearly 4,000 houses constructed by the GoG without running water or sewer systems for IDPs from the August 2008 conflict, to provide each house with a shower, sink, toilet, water taps and other renovation as necessary. The funds will also be used to upgrade existing IDP shelters and redevelop buildings for use as durable housing for IDPs from previous conflicts. Funding will also support various other activities focused on ensuring overall sustainability of IDP housing.

Activities performed under this task order will complement and reinforce the activities, project management, and engineering expertise of USAID/Georgia and its implementing partners. From 2010 to 2013, USAID/Georgia will undertake works in the infrastructure sector in collaboration with MDF to upgrade municipal infrastructure in targeted municipalities, to install and extend irrigation channels, and to upgrade IDP housing. Municipal infrastructure and irrigation rehabilitation will be implemented through an agreement with the MDF, and the IDP housing will be implemented through a separate agreement with this same agency. Tt is expected to form a close working relationship with the MDF in the implementation of both projects, accompanying the MDF in all phases of the projects and providing monitoring and oversight services to the MDF and USAID. Tt will monitor current processes and practices, identify and mitigate areas of risk, and carry out oversight and quality control efforts to ensure that selected infrastructure projects are implemented effectively and in accordance with U.S. and Georgian standards and regulations. Efforts will not duplicate work that MDF does or might perform under its agreement with USAID. The monitoring and oversight role will encompass all areas of project intervention, from procurement planning to final acceptance. It will help to ensure that infrastructure deliverables are effective, efficient, and sustainable and that implementation is carried out within allowable budgets, time restraints, and within accepted quality standards.

2.5 **Project Components**

The project includes three major components and two subcomponents (see Figure 1):

- I. Component I: Municipal Infrastructure
- 2. Component 2: Rehabilitation Of Irrigation Infrastructure
- 3. Component 3: IDP Durable Housing
 - a. Subcomponent I: Provide Water And Sanitation Upgrades For IDP Cottage Housing For IDPs From the August 2008 Conflict
 - b. Subcomponent 2: Provide Durable Housing Solutions For IDP From 1990s Conflict

Figure I Project Components

Project Components

Component 1 Municipal infrastructure

Focus on rehabilitating infrastructure in municipalities affected by 2008 conflict. Infrastructure rehabilitation will include roads, bridges, drainage channels, water and sanitation improvements.

- \$9.57 million
- 270,000 beneficiaries including 24, 000 IDPs
- Dusheti, Mtskheta, Gori, Kareli and Oni municipalities.

Component 2 Irrigation

Focus on new or greatly enhanced agriculture productive capacity. It will be focused on rural population, IDPs and persons affected by 2008 conflict.

- \$8.16 million
- 18,000 hectares of agricultural land restored to productivity
- Shida Kartli focus
- At least 20,000 beneficiaries.

Component 3 IDP Housing

Provide IDPs with durable housing solutions using two subcomponents including 'cottages' and collective settlements.

- \$34.67 million
- Subcomponent 1: \$8.67 million, 2,000 cottage units rehabilitated.
- Subcomponent 2: \$26 million, 2,600 apartments . Project will focus on Qareli, Khashuri, Kutaisi and Zugdidi.

3.1 Overview and Management

Tetra Tech (Tt) is responsible to USAID for providing oversight related to the identification, verification, and reasonableness of proposed infrastructure development and rehabilitation projects. This includes the verification of work scope quantities, cost/benefit, and other impact analysis for irrigation channels, municipal infrastructure, and housing rehabilitation. Tetra Tech is providing expert advice on the verification final selection of proposed infrastructure. Once proposed infrastructure projects are selected, Tetra Tech is responsible for supporting to successful completion all phases of implementation of infrastructure from initial planning through project acceptance. This oversight support is provided to USAID/Georgia or to MDF as directed by USAID/Georgia. It includes the review of MDF's tendering and procurement, feasibility studies, environmental scoping and assessments, design review, construction management, quality control, monitoring, inspection and acceptance, operation and maintenance, and technical training of both MDF and infrastructure recipients (users).

3.2 Project Partners

The GMIP has a number of cooperating partners. The primary partners implement the project on day-to-day basis are USAID/Georgia (USAID), Government of Georgia Municipal Development Fund (MDF), Tetra Tech (Tt), and the MDF feasibility, design, and construction contractors.

Overall responsibilities of each of the project partners are shown in Table I and described below.

Table 1: Project Participants Roles and Responsibilities

Partner	Role/Responsibility
United States Agency for International	✓ Governance
Development (USAID)	✓ Funding Agency
	✓ Approval Authority for all deliverables
	✓ Approval Authority of all financial payments
	✓ Approval of procurement and administrative processes
	defined in the TO and ILs
	✓ Approval of Program contracting steps
	✓ Approval of Contract Administrative actions
	✓ Approval of Contractor contract changes
	✓ Technical Direction of Contracts
	✓ Responsible for overall Project Management
	✓ Project selection
Government of Georgia Municipal	✓ Procurements of goods and services
Development Fund (MDF)	✓ Overall monitoring and reporting of the project
	✓ Designing and planning infrastructure activities
	✓ Performing required works
	√ Implementing environmental mitigation practices
	✓ Developing procurement strategy
	✓ Implementing procurement
	✓ Tendering
	✓ Awarding and managing rehabilitation-related activities
	that have been outsourced to a contractor
	 ✓ Contract administration (cost, scope, schedule)
	✓ Construction management
	✓ Site supervision

Partner	Role/Responsibility	
	✓ Contract QA/QC	
	✓ Applying Georgian and applicable USG standards and	
	regulations to all appropriate processes and practices	
	✓ Closing-out all rehabilitation activities.	
Tetra Tech –	✓ Project Management Oversight	
USAID Contractor	✓ Environmental studies support	
	✓ Programmatic Environmental Assessment Comp 3	
	✓ Environmental Impact Assessment (for Components I	
	and 2 – if required)	
	✓ Planning Activities	
	✓ Oversight of procurement	
	✓ Support and Review of bid document preparation	
	✓ Building MDF capacity	
	✓ Design Review Activities	
	✓ Technical Support and Oversight	
	✓ Construction management oversight	
MDF Contractors	✓ Environmental Scoping	
	✓ Feasibility Studies	
	✓ Design	
	✓ Construction supervision	
	✓ Materials testing	
	✓ Construction	

3.2.1 United States Agency for International Development (USAID):

The funding for the project is provided by USAID. The Task Order Contracting Officer's Representative (COR), Brad Carr (Water, Irrigation, and Infrastructure Advisor, USAID Economic Growth Office) is responsible for managing the program for USAID. He is supported by George Kokochashvili (Engineering Specialist).

At the highest level, USAID coordinates all work planning and construction budgeting with the GoG. USAID/Georgia is managing and implementing the program with the assistance of two main contractors, MDF and Tetra Tech. The contract with Tetra Tech is through a Task Order (TO). The contracts with MDF are through two Implementation Letters (ILs). USAID is responsible for ensuring all contracting processes undertaken under the project are in compliance with specific provisions of the USG Foreign Assistance Act and USAID policies governing USAID-financed project procurement. USAID is doing this through approval of activity designs, review of the general contractor's environmental reports and assessments, site visits, etc.

3.2.2 Government of Georgia Municipal Development Fund (MDF):

MDF is responsible for providing assistance to strengthen the institutional and financial capacity of local government entities. This includes investing in local infrastructure and services, improving the primary economic and social services for the local settlers, developing renewable energy (micro power plants and geothermal) sources, creating a sustainable economic basis for refugees, rehabilitating irrigation and drainage systems, providing low-interest loans to legal entities and physical persons, and providing technical assistance to foreign and Georgian organizations for developing business in Georgia and rehabilitation of war damage. MDF manages projects for provision of temporary and permanent shelters for IDPs. MDF evaluates the conditions of selected buildings for durable housing schemes and is responsible for the construction and rehabilitation of these buildings as part of the durable housing program.

Under the USAID Improved Economic infrastructure program, GoG's Municipal Development Fund (MDF) has been assigned the responsibility to perform the contracting to implement the USAID/Georgia Economic Infrastructure Program for the period of the contract from 17 February 2011 to 31 December 2013. MDF is responsible for all development or rehabilitation work, including designing and planning infrastructure activities; performing required works; implementing environmental mitigation practices; tendering, awarding and managing rehabilitation-related activities that have been outsourced to a contractor; applying Georgian and applicable USG Standards and regulations to all appropriate processes and practices; and closing-out all rehabilitation activities. USAID successfully carried out a certification process relating to MDF's financial, technical and procurement management capacity to perform its responsibilities under this program.

The coordination for MDF activity and its management is conducted by the Supervisory Board, the composition of which is appointed by the Decree of the Government of Georgia. All activities that are jointly supported, and that have prior USAID/Georgia support to fund will be forwarded to the supervisory committee of the MDF for final approval.

MDF is managed by the Executive Director appointed by the Prime-Minister. MDF's organization is as follows:

- Executive Director;
- Internal Audit Division:
- Administrative Department (Procurement Division; Financial Division; Management Information Systems Division; and Administrative Support Unit);
- Investment and Loans Department (Technical Division; Project Management; and Monitoring and Evaluation Division);
- The Social Investment Department (SID) (Technical Division; Project Management and Monitoring and Evaluation Division);
- Irrigation Department (which includes: Melioration Associations Division; and Technical Division).

MDF is conducting all procurement actions financed under the project in accordance with the World Bank Procurement procedures and the additional USAID procurement requirements provided in the ILs.

MDF will carry out the supervision of all aspects of the implementation of contracts procured under a specific loan/grant, (i.e. technical supervision, contract management and financial control, payments to contractors and/or suppliers, environmental impact monitoring, etc.). MDF will carry out its supervision either directly through MDF staff or with the assistance of consultants hired by MDF to that effect.

3.2.3 Tetra Tech:

Tetra Tech under its TO with USAID is providing support to USAID Georgia's for oversight and monitoring of MDF's activities.

Tt is working closely with MDF, accompanying MDF in all phases of the project and providing monitoring and oversight services to MDF and USAID. Efforts have been made not to duplicate the work MDF does or might perform. The monitoring and oversight role includes all areas of project intervention from procurement planning to final acceptance. It also ensures that infrastructure outputs are effective, efficient, and sustainable and that implementation is carried out within allocated budgets and time restraints. Further, in this role Tt oversees adherence to applicable Georgian and USG standards and regulations in the areas of contract award, financial payments, design planning, construction practices and compliance with applicable codes or regulations, including environmental protection and mitigation measures.

Tt is providing professional assistance across a range of areas, such as professional engineering support, planning, procurement, and other technical assistance. Tt provides design oversight/review, as well as QA/QC oversight of the selected projects.

Project Selection: Tt provided early support to USAID and MDF to help select projects and ongoing support throughout the implementation process. Tt and USAID are jointly monitor current processes and practices, identify and mitigate areas of risk, and carry out oversight and quality control efforts to ensure that selected projects are implemented effectively and in accordance with both US and Georgian standards and regulations.

Environmental Clearance: A portion of Tt's work focuses on the environmental aspects of the program. Tt's scope include i) providing oversight for the development of environmental scoping statements for components I and 2; ii) providing the Programmatic Environmental Assessment for component 3; and, iii) providing environmental impact assessments for components I and 2 if required.

MDF Capacity Building: Tetra Tech has assessed of MDF's processes and practices. A Gap Analysis was conducted in May 2012. Tt will continue to provide and conduct necessary trainings to MDF in all areas of project implementation, from procurement planning to final acceptance. Tt will also continue to help ensure that infrastructure outputs are effective, efficient and sustainable and that implementation is carried out within allowable budgets and time restraints. Further, in this role Tt is overseeing adherence to applicable Georgian and US standards and regulations in the areas of contract award, financial payments, design environmental protection and mitigation practices.

Design Review Activities: Tt carries out detailed review of housing and infrastructure designs, plans, and cost estimates for assigned USAID programs and activities including any proposed changes to designs during the course of project implementation. In addition, Tt ensures that the design products comply with the appropriate national and US standards and best practices.

Technical Support and Oversight: Tt is providing project management oversight services for contracts/agreements to assure use of engineering and construction best practices for IDP housing and infrastructure development and rehabilitation that include:

- I. Review of the **feasibility and cost/benefit analyses** for acceptance/rejection decisions based on technical and economic criteria.
- 2. Providing technical oversight with respect to implementation staff, keeping USAID and MDF informed of work progress and implementation issues
- 3. Ensuring that all interventions are in accordance and **compliance** with appropriate USAID/Georgian **codes and regulations**
- 4. Supporting and monitoring MDF to insure **compliance with the procurement policies** and procedures specified by agreement between USAID/Georgia and MDF.
- 5. Preparing and/or review of reports and work plans, provide recommendations regarding the **viability and cost effectiveness of interventions** & identify alternatives as needed.
- 6. Monitoring the adequacy, quality and acceptability of delivered goods and services through construction inspection and surveillance services, reviewing contractor reports, and meeting with implementation partners.
- 7. Assisting in the development of **solutions for architecture and engineering** issues that cannot be resolved by the implementers.
- 3. Reviewing and responding to proposed **changes in design and construction contracts**, the validity of claims, and contract time extensions.
- 9. Fulfilling **certain administrative responsibilities** including, but not limited to, activities such as estimating expenditures, reviewing payment vouchers, responding to audits, assessing claims, and performing other related activities.

10. Fulfilling quality control/quality assurance services, including materials measurement and services analysis, environmental monitoring, and testing to ensure delivered products are in accord with design specifications and drawings.

3.2.4 MDF Contractors

MDF contractors are selected based on competitive bidding procedures. During the bidding process, contractors are required to present their staffing proposal and organizational structure to meet the needs of the individual projects. Companies are required to have appropriate construction and design capabilities to suit the requirements requested in the bidding documents.

3.2.5 Major Stakeholders

Key Government Organizations:

The Ministry of Internally Displaced Persons from the Occupied Territories, Accommodation and Refugees (MRA) is responsible for Internally Displaced Persons (IDP) to include selection of buildings and beneficiaries for the durable housing program. MRA has regional offices which are responsible to implement GoG IDP policy in the field. They are involved in program implementation and act as focal points for municipalities.

The Ministry of Regional Development and Infrastructure (MRDI) is responsible for the development, implementation and coordination of the policy of regional development of Georgia. MRDI coordinates with MRA for selecting buildings for the durable housing schemes, selection of beneficiaries and coordination of regional project implementation, as well as any coordination with other donors and technical assistance activities.

The Ministry of Agriculture (MOA) is responsible for support of projects from the perspective of agricultural development. Such involvement should enable Georgian citizens to gain maximum agricultural benefit by launching different supportive projects. The Department of Amelioration Scheme Management of the Ministry of Agriculture (MOA) has under gone several reorganizations over the last 10 years. In 2006 it was reorganized into four state owned limited liability companies responsible for operating and maintaining the higher-order irrigation infrastructure. LTD Mtkvari-M with headquarters in Mtskheta was responsible for the Saltvisi and Tiriponi irrigation schemes being rehabilitated under GMIP. These particular schemes were managed by the subdivision office based in Gori as well as present in strategic locations in the command area. More recently (April 2012) the four state owned limited liability companies were consolidated back into a single Department of Amelioration. The Gori regional office is still responsible for the main systems of the Tiriponi and Saltvisi schemes.

Local government at the district-level is under the jurisdiction of various municipalities. The municipalities although under the regional governors have been setup to be self-governing. Some of the functions/responsibilities of the municipalities include: managing and disposing of local government property; regulating use of natural resources, protecting the environment; resolving issues of land use in subordinate territories; organizing waste disposal; organizing sanitation, antiepidemic and veterinary measures; preserving cultural heritage; developing and maintaining power, gas, water supply and land improvement systems; and constructing, maintaining and repairing regional roads.

USAID/Georgia Programs

There are two key USAID programs that offer potential for cooperation and collaboration with GMIP:

The Economic Prosperity Initiative (EPI) is a \$40.4 million program designed to expand market linkages and improve the competitiveness of Georgian agriculture and agri-businesses, manufacturing and service industries to meet market opportunities. EPI is assisting the GoG to broaden and deepen reforms that enhance the environment for business to flourish and that attract greater volumes of foreign investment. GMIP has not done much work with EPI.

New Economic Opportunities (NEO) is a \$20 million program designed to a) improve rural incomes, b) reduce poverty levels, c) improve food security, d) address critical, small-scale household and agricultural water constraints in targeted communities, and, e) enable targeted IDP communities to sustainably maintain their households. It is structured to work primarily at the local level, with some national-level support.

GMIP has been working quite closely with NEO project, particularly with their efforts to form housing and cottage associations. NEO is providing trainings for IDPs who will be settled or resettled in rehabilitated buildings including 8 hospitals, 28 collective centers and 10 unoccupied buildings. NEO will also target the 9 new IDP cottage settlements (in addition to current 2) with the same approach and will select approximately 90-100 people from there to be trained under vocational education programs. Tetra Tech has assisted in developing lists of types of skills required, one for skilled (with professional background) and one for unskilled workers.

Donor Organizations/NGOs

Donor organizations and NGOs have played major roles in the development of durable housing by providing financial and material assistance and ensuring the proper planning and implementation of humanitarian programs for IDPs. Two of the agencies active in the program include UN, working through its humanitarian arms of UNOMIG, UNHCR, UNDP, UNICEF, World Food Program, and FAO, as well as USAID with its implementing partner NGOs including Save the Children, IRD Counterpart, Care, and Mercy Corp. The European Commission Humanitarian Office (ECHO) was a significant donor organization for several years. In 2008 International donors provided USD 219.9 million. GIZ (Formerly GTZ) also has contributed significantly to the improvement of IDP Housing.

The Organization for the Security and Co-operation of Europe (OSCE) conducted an assessment of irrigation in the Shida Kartli Region as part of OSCE's contribution in seeking a solution for avoiding conflict in the region. They have been active in supporting the rehabilitation of Zonkari dam in South Ossetia which previously supplied water to the Tiriponi Irrigation system under rehabilitation under GMIP.

NGOs such as Norwegian Refugee Council (NRC) have played important roles by supporting other activities, including a) information dissemination and awareness campaigns, b) provision of legal services, and c) implementation of livelihood, agriculture, infrastructure and housing rehabilitation projects. In the 2008 crisis NGOs played a crucial role in mobilizing resources for the emergency shelter and care of IDPs.

More recently the Danish Refugee Council has provided support funding to MRA. They are currently implementing a project with MRA called Durable Housing Solutions Framework and it runs the whole of 2011 and 2012. The purpose is to assist MRA in implementing Durable Housing solutions by assisting in developing and implementing procedures for resettlement, closure of Collective Centers (CC's) and privatization etc. and assisting newly privatized CC in establishing condominiums. It also has a component for capacity development of MRA.

4. PROJECT WORK PROGRAM

4.1 Project Tasks

The major project Tasks are shown in Table 2. Each of the Tasks and Tetra Tech's roles and responsibilities are described below.

Table 2 Project Phases/Activities

Task	Time Period	Status
Project Selection	May 2011 – Aug 2012	Completed
Environmental Clearances	Jun 2011 – Nov 2012	On-going
Procurement	Sep 2011 – Nov 2012	On-going
Design/Construction	May 2012 - Nov 2013	On-going
Capacity Building	Jun 2011 – Sep 2013	On-going

4.2 **Project Selection**

This phase has been completed. It began in May 2011 and was completed in Aug 2012. Table 3 presents the current status. Depending on final bid costs, ownership issues and willingness of IDPs to participate (Component 3.2 Buildings), and USAID funding ceilings, the list of selected projects is subject to adjustment. A map showing the Project locations is shown in Figure 2.

Table 3 Project Selection Status

#	Com p	Location	Subproject Name	Cost Estimate (USD)	Status
I	I	Dusheti	Rehabilitation of town of Dusheti streets and storm drains (3 km, 8 streets)	851,998	Approved
2	I	Kareli	Rehabilitation of Sogholasheni-Dvani motor road (12 km)	2,365,445	Approved
3	I	Mtskheta	Mtskheta Roads (10.4 km, 32 streets) Rehabilitation of roads for development of infrastructure in Mtskheta Municipality	1,653,129	Approved
4	I	Oni	Oni Roads (2.4 km, 5 streets) Installation of asphalt paving in Town Oni internal roads	894,671	Approved
5	I	Oni	Rehabilitation of water supply in Oni	508,318	Approved
6	I	Gori	Rehabilitation of internal water supply in Gori (122 buildings; 3765 apartments)	1,025,701	Approved
7	ı	Gori	Rehabilitation of Pushkin St. (0.92 km)	414,538	Approved
8	I	Gori	Rehabilitation of road to Gorijvari Saint George Church in Gori (1.45 km)	1,006,568	Approved
		Sub-Total		8,720,368	
9	2	Shida Kartli	Rehabilitation of Tiriponi & Saltvisi Irrigation Systems	8,100,000	Approved
		Sub-Total		8,100,000	
10	3.1	Gori, Kareli, Kaspi, Mtskheta	Rehabilitation of Water Supply Systems for 9 IDP Cottage Settlements	601,226	Approved
П	3.1	Gori, Kareli, Kaspi, Mtskheta	Internal Water Supply, Drainage, and Sanitary Upgrades for 11 IDP Cottage Settlements	5,998,223	To be finalized after design
		Sub-Total		6,599,449	
12	3.2	Shida Kartli, Kvemo Kartli, Imereti	Rehabilitation Works for IDP's Housing (10 Bldgs)	4,757,422	Approved
13	3.2	Imereti,	Rehabilitation Works for IDP Housing for 8	8,930,419	To be finalized

#	Com	Location	Subproject Name	Cost	Status
	р			Estimate (USD)	
		Kakheti, Shida Kartli	Former Hospital Buildings		after design
14	3.2	Imereti,Samegre Io, Zemo Svaneti	Rehabilitation Works for IDP Housing for 28 Collective Centers	11,208,314	To be finalized after design
15	3.2	Kutaisi	Design & Construction of New Buildings	957,059	To be finalized after design
		Sub-Total		25,853,214	
		Total		49,273,031	

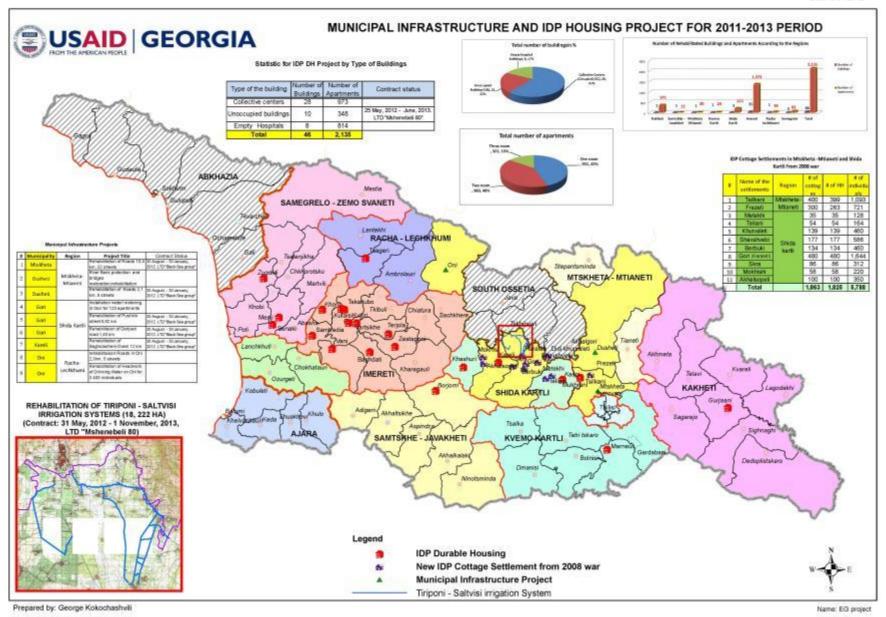


Figure 2 GMIP Project Location Map

4.3 Environmental Clearance

The Environmental Clearance Phase is on-going. It began in June 2012. Table 4 presents the status of the Environmental clearance process. There are three Task order work requirements involving environmental level of effort:

- A. Environmental Scoping Statements
- B. Programmatic Environmental Assessment
- C. Environmental Impact Assessment (for Components 1 and 2 if required)

A. Environmental Scoping Statements have been prepared for all Components and sub-projects. One sub-project is waiting USAID approval: Municipal Infrastructure Oni Water Supply project.

B. Programmatic Environmental Assessment has been approved for Component 3.

C. Environmental Impact Assessments (for Components I and 2 – if required) have been completed and approved for all sub-projects except for one Municipal Infrastructure project: Oni Water Supply project.

Remaining activities to be carried out by Tt as part of the Environmental Clearances include:

- I. Preparation of EA Oni Water Supply project.
- 2. Preparation of update of PEA for Component 3 to accommodate New Building Construction.

Table 4 Environmental Clearance Status

No	Comp	Item	Action	Status
I	I	Roads	SS, EA	Approved
2	I	Roads addendum	Addendum	Approved
3	I	Flood Protection	SS	SS Approved; Contract cancelled. EA not required
4	I	Water Supply Oni	SS, EA	SS submitted, waiting approval. EA under preparation
5	I	Water Supply Gori	IEE Negative Determination with conditions	Approved
6	2	Irrigation	SS, EA	Approved
7	3	IDP Housing	SS, PEA	Approved
8	3.2	IDP Housing with Hospitals	PEA update	Approved
9	3.1	IDP Housing with water supply & drainage	PEA update	Approved
10	3.2	IDP Housing for New Buildings	PEA Update	Under preparation

4.4 Procurement

The Procurement Phase is on-going. It began on 15 September 2011. Table 5 presents the status of procurement under GMIP. Table 6 presents the Project Procurement Plan.

Table 5 Procurement Status (October 2012)

#	Description	Туре	Status
	Component I (Municipal Infrastructure)		
I	Rehabilitation of Access Road of Village Gorijvari, Internal Roads in Towns of Gori, Mtskheta, Dusheti, and Municipal Road Sagolasheni – Dvani. USAID/CW/ICB/03-2012	Design-Build	Signed/on- going
2	Rehabilitation of Internal Roads in Town Oni IFB No. USAID/W/ICB/03-L2/1-2012	Design-Build	To be signed
3	Rehabilitation works for Install water metering of 122 Housing and regulation valves in Town Gori, "Kombinati Residence" ICB No: USAID/CW/ICB/04-2012	Design-Build	IFB issued; Bids due: Oct 12
4	Improvement of water supplying system of town Oni	Construction	Under preparation
5	Preparation of the Detailed Engineering Design, Bidding Documentation Package and Provision of Design Inspection Services for Rehabilitation Works for Dusheti Gorge Flood Protection in Dusheti Town RFP No.: USAID/C/QBS/03	Consulting Services (Design/Design Inspection)	RFPs Cancelled (Oct 12)
	Component 2 (Irrigation)	D : B : I	6: 1/
6	Rehabilitation Works for Tiriponi and Saltvisi Irrigation Systems ICB No: USAID/W/ICB/02-2012	Design-Build	Signed/on- going
_	Component 3.1 (Cottage Settlements)		
7	Improvement of potable water supply in 9 villages of IDPs (Gori, Kareli, Kaspi and Mtskheta Municipalities) ICB No: USAID/CW/ICB/05-2012	Construction	Under preparation
8	Preparation of the Detailed Engineering Design and Bidding Documentation Package and Provision of Design Inspection Services for Internal Water Supply, Drainage, and Sanitary Upgrades for 11 IDP Cottage Settlements	Consulting Services (Design/Design Inspection	RFP under preparation
9	Construction Services for Internal Water Supply, Drainage, and Sanitary Upgrades for 10 IDP Cottage Settlements	Consulting Services (Construction Management)	To be prepared
10	Construction Works for Internal Water Supply, Drainage, and Sanitary Upgrades for 10 IDP Cottage Settlements	Construction	To be prepared
	Component 3.2 (Building rehabilitation)		
П	Rehabilitation Works for IDP's Houses IFB No. USAID/W/ICB/01-2011	Design-Build	Signed/on- going
12	Preparation of the Detailed Engineering Design and Bidding Documentation Package and Provision of Design Inspection Services for Rehabilitation Works for IDP Housing for Eight (8) Former Hospital Buildings RFP No.: USAID/C/QBS/01	Consulting Services (Design/Design Inspection)	RFPs under evaluation
13	Construction Services for Rehabilitation Works for IDP Housing for Eight (8) Former Hospital Buildings	Consulting Services (Construction Management)	Under preparation
14	Rehabilitation Works for IDP Housing for Eight (8) Former Hospital Buildings	Construction	To be prepared
15	Preparation of the Detailed Engineering Design, Bidding Documentation Package and Provision of Design Inspection Services for Rehabilitation Works for IDP Housing for Twenty- Eight (28) Buildings RFP No.: USAID/C/QBS/02	Consulting Services (Design/Design Inspection)	RFPs under evaluation

#	Description	Туре	Status
16	Construction Services for Rehabilitation Works for IDP Housing	Consulting Services	Under
	for Twenty-Eight (28) Buildings	(Construction Management)	preparation
17	Rehabilitation Works for IDP Housing Rehabilitation Works for	Construction	To be
	IDP Housing for Twenty-Eight (28) Buildings		prepared
18	Preparation of the Detailed Engineering Design, Bidding	Consulting Services	To be
	Documentation Package and Provision of Design Inspection	(Design/Design Inspection)	prepared
	Services for New Buildings for IDP Housing		
19	Construction Services for New Buildings for IDP Housing	Consulting Services	To be
		(Construction Management)	prepared
20	New Buildings for IDP Housing Rehabilitation Works for IDP	Construction	To be
	Housing		prepared

Two contracts for Feasibility studies and scoping statements were signed in May 2011 and completed in January 2012. Contracts for design-build for rehabilitation of 10 unoccupied buildings for IDP housing and for the irrigation rehabilitation of Tiriponi & Saltvisi Systems were signed in May 2012. Two road design-build contracts for 6 road subprojects were signed in August 2012. Two contracts for design of buildings for rehabilitation for IDP housing are expected to be signed in October 2012. One contract for design of Dusheti Gorge Flood Protection in Dusheti Town was cancelled in October 2012 because of funding limitations. Tenders for design –build for a water supply project for 122 buildings in Gori was announced in September 2012 and the construction of Water Supply improvements for Cottage Settlements is expected to be announced in October 2012.

Procurement bid documents for construction and/or Requests for Proposal for consulting services to be prepared, remaining to be prepared and issued under GMIP include:

Component I (Municipal Infrastructure)

- 1. Design-Build for Gori Water Supply (Rehabilitation works for Installing water metering of 122 Housing and regulation valves in Town Gori, "Kombinati Residence")
- 2. Construction Contract for Oni Water Supply (Improvement of water supplying system of town Oni)

Component 3.1 (Cottage Settlements)

- 3. Construction Contract for Water Supply Upgrade (Improvement of potable water supply in 9 villages of IDPs: Gori, Kareli, Kaspi and Mtskheta Municipalities)
- 4. Design for Sanitary Upgrades (Drainage, waste water treatment, internal water tap connection, installation of toilets and showers)
- 5. Construction Management for Sanitary Upgrades (Drainage, waste water treatment, internal water tap connection, installation of toilets and showers)
- 6. Construction Contract for Sanitary Upgrades (Drainage, waste water treatment, internal water tap connection, installation of toilets and showers)

Component 3.2(IDP Buildings)

- 7. Construction Management for 8 Hospitals
- 8. Construction Contract for 8 Hospitals
- 9. Construction Management for 28 Occupied Collective Centers
- 10. Construction Contract for 28 Occupied Collective Centers

Table 6 Procurement Plan

ltem	Component	Sub-Component	Contract No.	Description	Cost (USD)	Contract Type	EOI Issue	EOI Open	RFP/IFB	Bid Due	Contract Period (mo)	Contract Signed	Contract Completed	Contractor
1	Municipal Infrastructure	Roads	ICB No: USAID/CW/ICB/03- 2012	Rehabilitation of Access Road of Village Gorijvari, Internal Roads in Towns of Gori, Mtskheta, Dusheti, Oni, and Municipal Road Sagolasheni – Dvani.	6,291,679	DB	N/A	N/A	8-Jun-12	9-Jul-12	5.0	17-Aug-12	14-Jan-13	Black Sea Group
2	Municipal Infrastructure	Roads	IFB No. USAID/W/ICB/03-L2/1- 2012	Rehabilitation of Internal Roads in Town of Oni	894,671	DB	N/A	N/A	13-Jul-12	3-Aug-12	5.0	17-Aug-12	14-Jan-13	Arnabi 21
3	Municipal Infrastructure	Water Supply	ICB No: USAID/CW/ICB/04- 2012	Rehabilitation of Drinking Water Systems within Apartment Buildings in the City of Gori, "Kombinati Residence"	1,076,986	DB	N/A	N/A	17-Sep-12	22-Oct-12	8.0	21-Nov-12	19-Jul-13	TBD
4	Municipal Infrastructure	Water Supply	ICB No: USAID/CW/ICB/06- 2012	Rehabilitation of Water Supply Head Works in Town Oni	508,318	Construction	N/A	N/a	15-Oct-12	26-Nov-12	5.0	26-Dec-12	25-May-13	TBD
5	Municipal Infrastructure	Flood Protection	USAID/C/QBS/03	Preparation of the Detailed Engineering Design, Bidding Documentation Package and Provision of Design Inspection Services for Rehabilitation Works for Dusheti Gorge Flood Protection in Dusheti Town.	43,351	Consulting Services (Design)	18-May-12	5-Jul-12	1-Aug-12	31-Aug-12	3.5	Cancelled (Oct 12)	Cancelled (Oct 12)	N/A
6	Irrigation	Irrigation	ICB No: USAID/W/ICB/02-2012	Rehabilitation Works for Tiriponi and Saltvisi Irrigation Systems	8,100,000	DB	N/A	N/A	6-Feb-12	26-Mar-12	17.0	31-May-12	1-Nov-13	M80
7	IDP Housing	Cottage Settlements	ICB No: USAID/CW/ICB/05- 2012	Improvement of potable water supply in 9 villages of IDPs (Gori, Kareli, Kaspi and Mtskheta Municipalities)	703,828	Construction	N/A	N/A	15-Oct-12	26-Nov-12	6.0	26-Dec-12	24-Jun-13	TBD
8	IDP Housing	Cottage Settlements	TBD	Preparation of the Detailed Engineering Design and Bidding Documentation Package and Provision of Design Inspection Services for Improvement of Drainage (6 communities), internal water supply hook-ups (10 communities), Sanaitary Upgrades in 9 villages of IDPs (Gori, Kareli, Kaspi and Mtskheta Municipalities)	368,200	Consulting Services (Design)	23-Oct-12	13-Nov-12	27-Nov-12	8-Jan-13	3.0	7-Feb-13	8-May-13	TBD
9	IDP Housing	Cottage Settlements	TBD	Construction Management Services for Improvement of Drainage (6 communities), internal water supply hook-ups (10 communities), Sanaitary Upgrades in 9 villages of IDPs (Gori, Kareli, Kaspi and Mtskheta Municipalities)	368,200	Consulting Services (CM)	6-Mar-13	27-Mar-13	8-May-13	19-Jun-13	5.0	19-Jul-13	16-Dec-13	TBD
10	IDP Housing	Cottage Settlements	TBD	Improvement of Drainage (6 communities), internal water supply hook-ups (10 communities), Sanaitary Upgrades in 9 villages of IDPs (Gori, Kareli, Kaspi and Mtskheta Municipalities)	7,364,009	Construction	N/A	N/A	8-May-13	19-Jun-13	5.0	19-Jul-13	16-Dec-13	TBD
11	IDP Housing	Building rehabilitation	IFB No. USAID/W/ICB/01-2011	Rehabilitation Works for IDP's Houses (10 Unoccupied Buildings)	4,757,422	DB	N/A	N/A	3-Jan-12	10-Feb-12	12.0	25-May-12	1-Jun-13	M80
12	IDP Housing	Building rehabilitation	RFP No.: USAID/C/QBS/01	Preparation of the Detailed Engineering Design and Bidding Documentation Package and Provision of Design Inspection Services for Rehabilitation Works for IDP Housing for Eight (8) Former Hospital Buildings	134,221	Consulting Services (Design)	18-May-12	5-Jul-12	1-Aug-12	31-Aug-12	4.0	1-Oct-12	29-Jan-13	TBD
13	IDP Housing	Building rehabilitation	TBD	Construction Management Services for Rehabilitation Works for IDP Housing for Eight (8) Former Hospital Buildings	178,328	Consulting Services (CM)	24-Dec-12		29-Jan-13	12-Mar-13	12.0	11-Apr-13	6-Apr-14	TBD
14	IDP Housing	Building rehabilitation	TBD	Rehabilitation Works for IDP Housing for Eight (8) Former Hospital Buildings	8,617,870	Construction	N/A	N/A	29-Jan-13	12-Mar-13	12.0	11-Apr-13	6-Apr-14	TBD
15	IDP Housing	Building rehabilitation	RFP No.: USAID/C/QBS/02	Preparation of the Detailed Engineering Design, Bidding Documentation Package and Provision of Design Inspection Services for Rehabilitation Works for IDP Housing for Twenty-Eight (28) Buildings	209,279	Consulting Services (Design)	18-May-12	5-Jul-12	1-Aug-12	31-Aug-12	5.0	30-Sep-12		TBD
16	IDP Housing	Building rehabilitation	TBD	Construction Management Services for Rehabilitation Works for IDP Housing for Twenty-Eight (28) Buildings	222,793	Consulting Services (CM)	22-Jan-13		27-Feb-13	10-Apr-13	12.0	10-May-13	5-May-14	TBD
17	IDP Housing	Building rehabilitation	TBD	Rehabilitation Works for IDP Housing Rehabilitation Works for IDP Housing for Twenty-Eight (28) Buildings	10,776,242	Construction	N/A	N/A	27-Feb-13	10-Apr-13	12.0	10-May-13	5-May-14	TBD
18	IDP Housing	New Building	TBD	Preparation of the Detailed Engineering Design, Bidding Documentation Package and Provision of Design Inspection Services for New Buildings for IDP Housing	18,405	Consulting Services (Design)	1-Oct-12	22-Oct-12	6-Nov-12	18-Dec-12	5.0	17-Jan-13	16-Jun-13	TBD
19	IDP Housing	New Building	TBD	Construction Services for New Buildings for IDP Housing	18,405	Services (CM)	11-May-13	1-Jun-13	16-Jun-13	28-Jul-13	8.0	27-Aug-13		TBD
20	IDP Housing	New Building	TBD	New Buildings for IDP Housing Rehabilitation Works for IDP Housing	920,249	Construction	N/A	N/A	16-Jun-13	28-Jul-13	8.0	27-Aug-13	24-Apr-14	TBD

The Tt project team will continue to review and assist MDF in preparation of the procurement documents. The tenders for construction related work largely target local and regional firms. After completion of advertisement Tt is assisting MDF with pre-bid conferences. For the tender documentation, the Tt team's role includes assistance in preparation and review of specifications, TORs, employment requirements, etc. MDF is responsible for ranking, awarding, and contracting. Tt is responsible on behalf of USAID for observing and monitoring this process.

In accordance with USAID requirements Tt typically reviews the following items:

- I. Notice to prospective offerors
- 2. Lists of prequalified offerors (prior to issuance of the solicitation document)
- 3. Complete solicitation document (prior to issuance):
- 4. Contractor selection method (usually part of approval of solicitation document);
- 5. The selected contractor
- 6. Any MDF decision to terminate negotiations with the highest ranked offeror & to initiate negotiations with the next ranked offeror or to reject all offerors
- 7. The contract (prior to execution); and
- 8. Signed contract before financing.

The general steps in the procurement process are listed in Table 7.

Table 7 Procurement Process

Item	Description	Responsible		
		Organization		
Ι.	RFP/TOR/Bidding Document preparation	MDF with Tt support		
2.	Submission of BD/RFP to USAID	MDF		
3.	Clearance of BD/RFP	USAID / Tt		
4.	Preparation of EOI/RFP/IFB	MDF		
5.	Clearance of EOI/RFP/IFB	USAID/Tt		
6.	Publishing Specific Procurement Notice	USAID		
	(biding announcement) on FedBizOps			
7.	Publishing Specific Procurement Notice	MDF		
	(biding announcement) locally			
8.	Pre-Bid Conference	MDF /Tt		
9.	Opening of Bids	MDF (public)		
10.	Preparation of Evaluation Report and	MDF		
	Submission			
11.	Clearance of Evaluation Report	T _t		
12.	Contractor Negotiations/Clarifications	MDF		
13.	Contractor Due Diligence	Tt		
14.	Approval of Contractor	USAID		
15.	Submission of Draft Contract	MDF		
16.	Clearance of Contract	USAID / Tt		
17.	Notification of Award	MDF		
18.	Contract Signing	MDF		
19.	Clearance of Signed Contract	USAID/Tt		

4.5 Design

Design review is required by Tt for designs prepared by others, designs prepared under GMIP design consulting service contracts, and designs prepared under GMIP design-build contracts. Table 8 presents the status of designs to be reviewed/approved by Tt GMIP.

Because of several decisions—(a) use of Design-Build (b) use of designs prepared under contract with the Georgian Water Utility Company (GWUC) for municipal water supply designs—the design phase under GMIP is different than originally anticipated in the project design. However, as specified in the Task Order, Tt is responsible for carrying out detailed reviews of housing and infrastructure designs, plans, and cost estimates. This includes:

- Supporting and monitoring MDF to ensure compliance with the USAID/Georgia and MDF procurement policies and procedures.
- Evaluating design products relative to compliance with appropriate national and US standards and best practices.

Specific design activities to be carried out by Tt include:

- I. Whether a design build, direct construction, of the traditional design-bid-build will be used, Tt will review and approve all designs, BOQs, and technical specifications used in the bid documents.
- 2. Under Design-Build contracts Tt will review all design criteria, design specifications, drawings and BOQs as part of the design-build construction contract.
- 3. For the Direct Construction contracts Tt will review final working/good-for-construction drawings during the mobilization and setting out period. This will include design criteria, design specifications, drawings, and BOQs specified as part of the construction contract.
- 4. For all construction contracts Tt will also review and approve design changes during construction, as well as the final as-built drawings prepared by the contractors as required.
- 5. Tt will also provide assistance in the development of design solutions for architecture and engineering issues that cannot be resolved by the implementers.

Typical design review phases include:

For IDP Housing for Eight (8) Hospitals and Twenty-Eight (28) Buildings:

- 1. 10% Complete Pre-Concept, Design Notes, preliminary sketches for approval by MDF
- 2. 35 % Complete Preliminary design. Drawings and Specifications for approval by MDF
- 3. 75% Complete Draft Detailed Design, Drawings, Specifications, Contract Documents, BOQ, Engineer's Cost Estimate and Construction Schedule
- 4. 95% Complete Final Un-Reviewed Detailed Design, all Deliverables for Approval of MDF
 - Design Notes
 - Drawings
 - Specifications
 - BOQ
 - Engineer's Cost Estimate
 - Construction Schedule
 - Tender Documents
- 5. 100% all Deliverables after submission of Final Design Inspection Report.

For Design- Build Contracts:

- 6. Inventory (25%) submittal of design inventory drawings
- 7. Preliminary (50%) Design Submittal
 - Design analysis, developed to 50%
 - 50% complete drawings
 - Preliminary draft copies of all other design complete submittals
- 8. Final Un-Reviewed (95%) Design Submittals
 - Complete construction documents plans and specifications at the level of detail needed for bidding the project, including a complete list of BOQs, equipment, and materials.
 - The design analysis in its final form.
 - Draft version of special reports will be submitted.

- Marked-up specifications. Final draft copies of all other required design complete submittals.
- 9. Design Complete (100%) Submittal
 - Design analysis, in final 100% complete form
 - 100% complete drawings
 - Final specifications
 - Annotated 95% review comments
 - AutoCAD files of all drawings (applies to all other completion stages 25%, 50% and 95% As well)
 - Electronic Files of 100% complete drawings (applies to all other completion stages)
 - Final Reports of all other design complete submittal

Table 8 Designs to Be Reviewed/Approved by Tt GMIP

#	Description	Contract	Design	Designs
		Туре	Review/Approval	
	Component I (Municipal Infra			
	Rehabilitation of Access Road of Village Gorijvari, Internal Roads in Towns of Gori, Mtskheta, Dusheti, and Municipal Road Sagolasheni – Dvani.	DB	Required prior to Construction (25%,50%, 95%,100%); Design changes; As-built	1.Gorijvari (1.45 km) 2.Pushkin St. (0.92 km) 3.Mtskheta (10.4 km, 32 st.) 4.Dusheti (3 km, 8 st.) 5.Sagolasheni – Dvani
2	USAID/CW/ICB/03-2012 Rehabilitation of Internal Roads in Town Oni IFB No. USAID/W/ICB/03-L2/I-2012	DB	Required prior to Construction (25%,50%, 95%,100%); Design changes; As-built	Motorway (12 km) Oni Roads (2.4 km, 5 streets)
3	Rehabilitation works for Install water metering of 122 Housing and regulation valves in Town Gori, "Kombinati Residence" ICB No: USAID/CW/ICB/04-2012	DB	Required prior to Construction (25%, 50%, 95%, 100%); Design changes; As-built	1. 122 buildings; connections to 3765 apartments 2. Pumps (7) 3.Installation of Regulation Valves
4	Improvement of water supplying system of town Oni	Design by JSC "Saktskalproekti " for GUWC	Required prior to IFB (50%; 95%, 100%)	1.Head works rehab 2.Treatment facility 3.Chlorination tank 4.Reservoir tank
5	Improvement of water supplying system of town Oni	Construction	Design changes; As-built	TBD
6	Rehabilitation Works for Tiriponi and Saltvisi Irrigation Systems ICB No: USAID/W/ICB/02-2012	DB	Required prior to Construction (25%,50%, 95%,100%); Design changes; As-built	20 + sub-projects
	Component 3.1 (Cottage Sett	lements)	2 00.8 0	1
7	Design of Potable Water Supply Improvement and Surface Water Drainage for IDP's Settlements in 9 Villages Regional Municipal Infrastructure Development Project (RMIDP/EU/C/CQS/08)	Design by Holinger	Required prior to IFB (100%).	Water Supply Systems (9 settlements)
8	Improvement of potable water supply in 9 villages of IDPs (Gori, Kareli, Kaspi and Mtskheta Municipalities) ICB No: USAID/CW/ICB/05-2012	Construction	Design changes; As-built	TBD (includes drilling one new well + pipeline & one well rehab +tank reservoir + pipeline)
9	Design of Internal Water Supply, Drainage, and Sanitary Upgrades for 10 IDP Cottage Settlements	Design	Required prior to Construction (25%,50%, 95%,100%); Design changes; As-built	I.external drainage (7 settlements) 2.cottage gutters (10 settlements) 3.inner water taps & water meter (10 settlements) 4.central WWTF (10 settlements) 5.sewage network (10 settlements) 6.shower and toilet building with solar heating system (9 settlements)

#	Description	Contract Type	Design Review/Approval	Designs
10	Works for Internal Water Supply, Drainage, and Sanitary Upgrades for 10 IDP Cottage Settlements	Construction	Design changes; As-built	TBD
	Component 3.2 (Building reha	abilitation)		
11	Rehabilitation Works for IDP's Houses IFB No. USAID/W/ICB/01-2011	DB	Required prior to Construction (50%, 95%, 100%); Design changes; As-built	Buildings (10)
12	Preparation of the Detailed Engineering Design and Bidding Documentation Package and Provision of Design Inspection Services for Rehabilitation Works for IDP Housing for Eight (8) Formal Hospital Buildings RFP No.: USAID/C/QBS/01	Consulting Services (Design/Design Inspection)	Required prior to IFB (10%, 35 %, 75% 95% ,100%)	Buildings (8)
13	Rehabilitation Works for IDP Housing for Eight (8) Formal Hospital Buildings	Construction	Design changes; As-built	TBD
14	Preparation of the Detailed Engineering Design, Bidding Documentation Package and Provision of Design Inspection Services for Rehabilitation Works for IDP Housing for Twenty-Eight (28) Buildings RFP No.: USAID/C/QBS/02	Consulting Services (Design/Design Inspection)	Required prior to IFB (10%, 35 %, 75% 95%,100%)	Buildings (28)
15	Rehabilitation Works for IDP Housing for Rehabilitation Works for IDP Housing for Twenty-Eight (28) Buildings	Construction	Design changes; As-built	TBD
16	Preparation of the Detailed Engineering Design and Bidding Documentation Package and Provision of Design Inspection Services for New Buildings for IDP Housing	Consulting Services	Required prior to IFB (10%, 35 %, 75% 95%,100%)	Buildings (1-3)
17	New Buildings for IDP Housing		Design changes; As-built	TBD

4.6 Construction Phase

The Construction began in May 2012 and will run through June 2014, beyond the end of Tt's task order (November 2013. Table 9 presents the construction contracts to be monitored by Tt.

Project management oversight, capacity building and training exercises are conducted by Tetra Tech as per Oversight Task Order between Tt and USAID. Management of the construction works is conducted by MDF for the Rehabilitation of the 10 Unoccupied Buildings, irrigation, and roads contracts. The 8 Hospital and 28 Occupied CC building contracts will be outsourced to construction management firms. No firm decision has been made on the other contracts.

Specific activities to be carried out by Tt include:

I. Technical oversight of implementation staff, keeping USAID and MDF personnel informed of work progress and implementation issues through regular meetings and written communications.

- 2. Ensuring that all interventions are in accordance and compliance with appropriate USAID and Georgian engineering, architectural, construction, and environmental codes and regulations including, but not limited to, applicable occupation safety, fire codes, and 22 CFR 216.
- 3. Supporting and monitoring of MDF to insure compliance with the procurement policies and procedures specified by agreement between USAID/Georgia and MDF. These processes include evaluation of contract modifications.
- 4. Monitoring the adequacy, quality and acceptability of delivered goods and services through construction inspection and surveillance services, review of contractor reports, and meetings with implementation partners.
- 5. Monitoring delivered goods and services through construction observation and surveillance services, reviewing of contractor reports and meetings with implementing partners.
- 6. Assisting in the development of solutions for architecture and engineering issues that cannot be resolved by the implementers.
- 7. Reviewing of changes to construction contracts; evaluate the validity of claims and contract extensions.
- 8. Reviewing payment vouchers, responding to audits, and assess claims.
- 9. Quality control/quality assurance services, including materials measurement and services analysis, environmental monitoring, and testing to ensure delivered products are in accordance with design specifications and drawings.
- 10. Assisting with the close out of completed projects and the project close out report

Table 9 Construction Contracts to be Monitored by Tetra Tech

#	Description	Contract Type	Construction Period	Works		
	Component I (Municipal					
	Infrastructure)					
I	Rehabilitation of Access Road of Village Gorijvari, Internal Roads in Towns of Gori, Mtskheta, Dusheti, and Municipal Road Sagolasheni – Dvani. USAID/CW/ICB/03-2012	DB	Period: 5 months Start: Aug 12 Finish: Jan 13	I.Gorijvari (1.45 km) 2.Pushkin St. (0.92 km) 3.Mtskheta (10.4 km, 32 st.) 4.Dusheti (3 km, 8 st.)		
2	Rehabilitation of Internal Roads in	DB	Period: 5 months	5.Sagolasheni – Dvani Motorway (12 km) Oni Roads (2.4 km, 5		
	Town Oni IFB No. USAID/W/ICB/03-L2/1-2012		Start: Aug 12 Finish: Jan 13	streets)		
3	Rehabilitation works for Install water metering of 122 Housing and regulation valves in Town Gori, "Kombinati Residence" ICB No: USAID/CW/ICB/04-2012	DB	Period: 8 months Start: Nov 12 Finish: Jun 13	I. 122 buildings; connections to 3765 apartments Pumps (7) Installation of Regulation Valves		
4	Improvement of water supplying system of town Oni	Construction	Period: 4 months Start: Mar 13 Finish: Jun 13	I.Head works rehab 2.Treatment facility 3.Chlorination tank 4.Reservoir tank		
	Component 2 (Irrigation)					
5	Rehabilitation Works for Tiriponi and Saltvisi Irrigation Systems ICB No: USAID/W/ICB/02-2012	DB	Period: 17 months Start: Jun 12 Finish: Nov 13	20 sub-projects		
	Component 3.1 (Cottage Settlements)					
6	Improvement of potable water supply in 9 villages of IDPs (Gori, Kareli, Kaspi and Mtskheta Municipalities) ICB No: USAID/CW/ICB/05-2012	Construction	Period: 6 months Start: Nov 12 Finish: Apr 13	Nater Supply Systems (9 settlements) 2.new well + pipeline (1) 3.well rehab +tank		

#	Description	Contract Type	Construction Period	Works		
				reservoir + pipeline (I)		
7	Internal Water Supply, Drainage, and Sanitary Upgrades for 10 IDP Cottage Settlements	Construction	Period: 5 months Start: Jul 13 Finish: Nov 13	I.external drainage (7 settlements) 2.cottage gutters (10 settlements) 3.inner water taps & water meter (10 settlements) 4.central WWTF (10 settlements) 5.sewage network (10 settlements) 6.shower and toilet building with solar heating system (9 settlements)		
	Component 3.2 (Building rehabilitation)			,		
8	Rehabilitation Works for IDP's Houses IFB No. USAID/W/ICB/01- 2011	DB	Period: 12 months Start: May 12 Finish: Jun 13	Buildings (10)		
9	Rehabilitation Works for IDP Housing for Eight (8) Formal Hospital Buildings	Construction	Period: 12 months Start: Apr 13 Finish: Mar14	Buildings (8)		
10	Rehabilitation Works for IDP Housing for Rehabilitation Works for IDP Housing for Twenty-Eight (28) Buildings	Construction	Period: 12 months Start: May13 Finish: Apr14	Buildings (28)		
11	New Buildings for IDP Housing	Construction	Period: 8 months Start: Jun I 3 Finish: Feb I 4	Buildings (1-3)		

4.7 Capacity Building and Training

In developing this work plan and during the course of the project implementation Tt has placed, and will continue to place, capacity building at the forefront of all activities. We work closely with MDF, as well as the construction contractors to develop project-specific capacity through on-the jobtraining and mentoring. Tetra Tech also supports implementation of training and capacity building for the operators and managers of the newly rehabilitated infrastructure projects. Training consists of class room, field, and on-job-training.

Tetra Tech team is well equipped and prepared to plan and implement a more in-depth, formal, capacity building program under this contract. A Gap Analysis was conducted in May 2012. It recommended three trainings at three levels — on-the-job, informal internal experience sharing meetings and formal workshops. Funding for such training can also be nominal and is also project funds well spent. CM training is being provided to MDF and Construction Contractors involved in the GMIP subprojects. Training typically starts with Project Management and On-site Inspection staff and then continues with Construction Contractor staff. GMIP training is not seen as a one-time event. It is an on-going process that helps to assure that all staff working on the project in general, and on the project team in particular, can successfully implement, and assure the success of the project's quality goals and requirements.

Several of the subjects where Tetra Tech will continue to provide training over the next year include:

I. Environmental and Health & Safety Issues

- 2. Document Control Procedures
- 3. Preparation of Bid Documents for USAID
- 4. Contractor Evaluation procedures
- 5. Design review
- 6. Construction Management supervisor and reporting procedures
- 7. Financial reporting and contractor cash flow preparation

5. PROJECT SCHEDULE

5.1 General

A project schedule has been developed in MS Project to present graphically the details of the proposed implementation plan and the timelines for the implementation of different tasks, reporting, and planning activities. The schedule is included as an Annex I.

5.1.1 General Assumptions

The Project Schedule incorporates the following assumptions:

- Project Effective Date was May 23, 2011.
- Tetra Tech TO Completion Date is November 22, 2013
- Project task durations are shown in working days.
- The schedule does not consider US or Georgian holidays as non-working days.
- The schedule only includes tasks associated with the currently assigned activities. The schedule will be adjusted on a regular basis throughout the life of project.
- All reviewing authorities USAID, GoG, and others are expected to provide comments within 5-10 working days of receipt of documents, unless otherwise specified in the schedule.

5.1.2 Maintenance and Tracking of Project Schedule and Tasks

Tetra Tech uses MS Project as the tool for planning, management, and scheduling to help define critical-path schedules based on obtainable milestones to achieve deliverable dates. A master schedule was prepared by USAID. The schedule is maintained by Tetra Tech and updated weekly with assistance from USAID. It is included in the quarterly progress reports. Any events that substantially impact the project schedule are updated and discussed with the COTR at the bi-weekly meetings, or sooner if needed, and highlighted in the quarterly report.

5.2 Component I Municipal Infrastructure

Under the Municipal Infrastructure Component nine subprojects are being implemented: six road projects, two water supply projects for a total of USD 8,720,368. The Dusheti river bank flood protection project was cancelled due to budget limitations.

The six road sub-projects are being implemented under two design-build contracts and are expected to be completed by January 2013.

- Rehabilitation of Access Road of Village Gorijvari, Internal Roads in Towns of Gori, Mtskheta, Dusheti, and Municipal Road Sagolasheni – Dvani. (ICB No: USAID/CW/ICB/03-2012) with Black Sea Group LTD for USD 6,291,679 began in August 2012 and is expected to be completed in January 2012.
- 2. Rehabilitation of Internal Roads in Town of Oni(ICB No: USAID/CW/ICB/03-2012) with Arnabi 21 for USD 894,671 began in August 2012 and is expected to be completed in January 2013.

The two water supply projects are being implemented, one under a design-build and the second with a design-build contract.

- 1. Oni Rehabilitation of water supply head works in town of Oni. The designs were prepared by GUWC under GOG financing.). The tender date has not been set. The contract could be signed as late as March 2013 and be completed by June 2013.
- 2. Rehabilitation works for Installation of Water Metering of 122 Buildings and regulation valves in Town Gori, "Kombinati Residence" (ICB No: USAID/CW/ICB/04-2012. Tender

documents are expected to be ready by September. Construction is expected to begin in November 2012 and to be completed in June 2013

The River bank/Flood protection project was to be implemented as design-bid-build contract. Because of limited funds the contract for design was cancelled.

Qtr 4, 2013 Component 1. Municipal Infrastructure 5/18/11 - 8/14/13 1-5. Road project (5 project) 1/13/12 - 1/16/13 6. Oni Road (5 Streets) 1/13/12 - 1/3/13 Procurem ent 7/13/12 -9/5/12 Design/Build (Arnabi 21 LTD) Dusheti river bank protection project 6/4/12 - 10/8/12 6/22/12 - 1/8/13 Design Cancelled 10/8/12

Qtr 4, 2012

Qtr 2, 2013

8. Gori water measures/vertical pipes 7/25/12 - 8/8/13

Construction Design/Build 11/14/12 - 8/8/13

9. Oni Headwork rehabilitation 12/17/12 - 7/22/13

Construction 2/22/13 - 7/22/13

Figure 3 Component | Municipal Infrastructure Schedule

Qtr 2, 2012

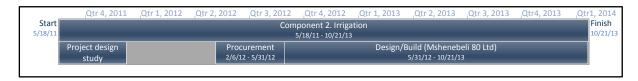
Qtr 4, 2011

5.3 Component 2 Irrigation

Under the Irrigation Component two subprojects are being implemented under a single design build contract for a total of USD 8,100,000.

The 17 month contract is with Mshenebeli 80 Ltd. Designs are being carried out by the "Saktskalproekti" JSC under a sub-contract.

Figure 4 Component 2 Irrigation Schedule



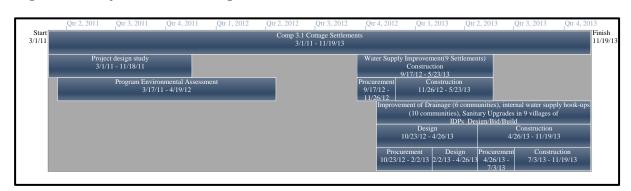
5.4 Component 3.1 Cottage Settlements

Under the IDP durable housing component for Cottage settlements USAID is committed to provide both water and sanitary upgrades to the cottage settlements where feasible and needed. The total USAID budget available for this component is USD 8,603,449. The current proposal assumes that USAID will fund external water supply improvements for 9 communities, external drainage for 7 communities, local cottage drainage for 10 communities, internal water supply hook-ups for 10 communities, shower and toilet systems for 9 communities, and waste water treatments systems and collection systems for 10 communities.

Two contracts will be implemented: one for construction for the Water supply works and a design-bid-build for the drainage, household water supply hookups, and the sanitary upgrades. Total costs are estimated at USD 8,067,836.

The construction contract for water supply will be a 6 month contract. It is expected to start in November 2012 and be completed by April 2013. The design-bid-build contract for sanitary upgrades is being planned as a 3 month design contract and a 5 month construction contract. It is expected to start in November 2012 and be completed in December 2013.

Figure 5 Component 3.1 Cottage Settlements Schedule



5.5 Component 3.2 Buildings

Under the IDP durable housing component ten (10) unoccupied buildings, eight (8) hospitals and 28 collective centers have been selected for rehabilitation. The selection process for other potential buildings to be rehabilitated is ongoing. The possibility of constructing new apartment buildings is also being considered per GOG request. The works are being implemented under different types of design-build and design-build contracts. Total costs available for this component at this time are USD 25,855,374.

The contract for the Rehabilitation Works for IDP Housing (10 Bldgs), "ICB No: USAID/W/ICB/01-2011, was signed in May 2012. It was issued as design-build contract It is a 12 month contract and is expected to be completed in June 2013. The contractor is Mshenebeli 80 Ltd. The total costs of the contract is USD 4,757,422

The procurement of the Rehabilitation Works for IDP Housing (8 Hospitals) is being done as a design-bid-build. The Design contract is expected to begin in September 2012 and be completed in January 2013 with duration of 4 months. Assuming a 2 month period for bid preparation and contractor selection, the contract for construction is expected to be a 12 month contract that will begin in April 2013 and be completed in March 2014. There will also be a contract for construction management that will run the duration of the construction program. The estimated cost for the three procurements is USD 8,930,419.

The procurement of the Rehabilitation Works for IDP Housing (28 CC) is being done as a design-bid-build. The Design contract is expected to begin in September 2012 and be completed in February 2013 with duration of 5 months. Assuming a 2 month period for bid preparation and contractor selection, the contract for construction is expected to be a 12 month contract that will begin in May 2013 and be completed in April 2014. There will also be a contract for construction management that will run the duration of the construction program. The estimated cost for the three procurements is USD 11,208,314.

USAID is considering construction of new buildings for IDP Housing with the remaining funds. A Concept study was carried out in May 2012 by Tetra Tech. It recommended that the works be implemented as design-bid-build. The Design contract could start as early as November 2012 and be completed in April 2013 with a proposed duration of 5 months. Assuming a 2 month period for bid preparation and contractor selection, the contract for construction is expected to be an 8 month contract that could begin in June 2013 and be completed in February 2014. There will also be a contract for construction management that will run the duration of the construction program. The estimated cost for the three procurements for a single building is USD 950,000. The number of building constructed will depend on the funds available.

Otr 4 2011 Otr 2 2012 Otr 4 2012 Otr 2 2013 Otr 4 2013 Otr 2 2014 Start Comp 3.2 IDP Durable Housing Finish 3/1/11 - 5/5/14 Project design study 3/1/11 - 11/18/11 IDP Housing Apartment Building 10 unoccupied buildings 12/30/11 - 8/29/13 Design/Build by LTD "Mshenebeli 80" Program Environmental 6/11/12 - 8/29/13 Assessment IDP Housing Apartment 8 empty Hospital buildings 12/30/11 - 5/25/12 Design Construction IDP Housing Apartment 28 Collective Centers 7/26/12 - 2/21/13 IDP Housing New Buildings 9/17/12 - 4/3/14 Design Construction 9/17/12 - 5/28/13 5/28/13 - 4/3/14

Figure 6 Component 3.2 Building Schedule

6.1 General

Tetra Tech is responsible for providing USAID/Georgia and its implementing partners at the Municipal Development Fund immediate access to a team of full-time and short-term technical assistance that includes all related fields of expertise required for successful oversight of implementation of Components I, 2, and 3 of the Task Order. Tt has assembled a strong and well qualified professional team of technical specialists to meet USAID's and the GoG's needs for the project. Required technical assistance spans the full range of expert engineering advice and oversight, organizational capacity building expertise, and the provision of analytical and technical support to USAID. The Tetra Tech team has been structured to provide technical assistance, oversight and quality control for building assessment and evaluation, engineering planning and design, and quality control/quality assurance planning. This expertise includes procurement management, engineering management, engineering, environmental science, construction management, monitoring and inspection, and technical training.

The staffing plan is designed to ensure successful implementation of Tetra Tech's technical approach. It seeks to maintain flexibility in response to evolving project needs and to provide additional resources to address fluctuations in workload. The Work Plan is designed to be responsive to the logistical and administrative challenges posed by concurrently implementing rehabilitation and infrastructure projects for 5 municipal infrastructure sub-projects (roads and water supply) in 5 municipalities; an irrigation project covering two major schemes totaling 18,000 ha with over 100 km of canals; water supply and sanitary upgrades for 11 cottage settlements (2000 cottages), and rehabilitation of 46 IDP buildings & 2,100 apartments located in 5 regions under more than 11 construction contracts in multiple locations throughout Georgia.

The scope of work over the next year (FY 2102/13) will include 15 future procurements (Table 6) totaling USD 31 million, design reviews for 17 separate contracts (design, design-build, construction) involving multiple sub-projects (Table 8), and construction management over site for 11 construction contracts (Table 9). Six of these contracts, total over USD 21 million, are expected to extend beyond January 1, 2014, the end of project date (22 November 2013) for the Tetra Tech Task order. These contracts involve the two IDP building rehabilitation sub-projects and the new IDP building project.

Tetra Tech has played a more critical and important role in project oversight than initially anticipated. At the request of USAID, Tetra Tech has increased its staff and level of effort in the transition from the preliminary project selection phase to the procurement and design/ construction phases. Specific areas that have required additional effort have included:

- I. Preparation of Environmental Assessments
- 2. Procurement preparation and review
- 3. Detailed Design review
- 4. Construction management over site
- 5. QA/QC compliance
- 6. Document Control
- 7. MDF Financial Invoice Reviews
- 8. Project Performance Monitoring

A GMIP Gap Analysis was carried out in May 2012. It recommended additional staffing support as follows:

- I. Two additional local project engineers,
- 2. More English language translation capability (one additional and perhaps even two persons).
- 3. Reports Writer/Executive Secretary

- 4. One additional LTTA expatriate construction engineer (or if funds not available support the project with regular expat and local STTA)
- 5. Two engineering students from the University (30 % salary).
- 6. Additional Office Space and Vehicles (2)

An additional local STTA roads engineer was hired in August 2102. Sufficient funds are not available at this time to hire an additional LTTA expatriate.

The Tetra Tech staffing plan includes a combination of long term (LTTA) including Jeffrey Fredericks (COP) and Ilia Eloshvili (DCOP) and CCN administrative and technical personnel based in the Tetra Tech Tbilisi office – short term (STTA) expat and local technical assistance (CCN) organized into several support teams. Additional support, oversight and management are provided by Tetra Tech home office staff as needed.

The Tetra Tech Tbilisi project office is adjacent to MDF. Day-to-day project activities are managed from this office. A regional office was opened in Kutaisi in March 2012. Expat short term technical assistance (STTA) are being used as needed. Arrangements to allow reach-back technical services to from Tetra Tech's home office as expat short Technical assistance have been implemented.

Additional support continues to be required from expat short term technical assistance (STTA). This mechanism provides technical resources for short term (2 to 4 week or longer) assignments by additional Tetra Tech technical specialists from the US to augment the in-country team, as required. STTA provides the ability to respond to a specific need and to focus on complex technical issues and staff surge requirements. All STTA international travel requests have been, and will continue to be, submitted to the COR for approval with detailed justification prior to mobilization.

The current Tetra Tech staffing plan is shown in Figure 7 below. The roles of the Tetra Tech Key Personnel are included as an Annex 2. A detailed table showing the proposed Level of Effort (LOE) for Year 2 is shown in Annex 3. A summary is presented in Table 10 below.

Table 10 Year 2 LOE Summary

ltem	Description	LOE (Days)
I	EM Home Office Support	27
2	Short-Term U.S. Tetra Tech RAI Home Office	76
	Employees	
3	Long-Term U.S./TCN Employees	260
4	Short-Term U.S./TCN Employees	45
5	RAI Subcontractors	135
6	ES Office Support	20
7	CCNs Consultants Long Term	2485
8	Short Term CCN Labor	242

6.2 Budget

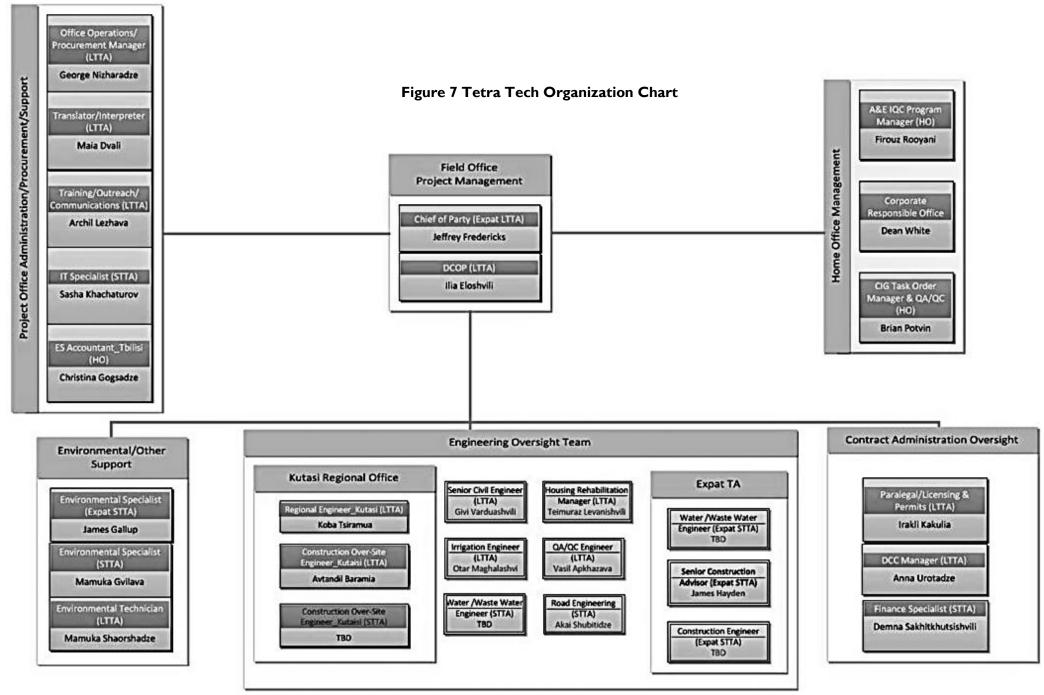
The Tetra Tech Task Order is for 30 months beginning in 23 May 2011 and finishing on 22 November 2013. The project has a total budget of USD **4,777,396.** Tetra Tech submitted proposed budget realignment in September 2012 based on actual expenditures in Year I. Table 11shows the differences in the two budgets.

Table II Budget Realignment

Year	Original	(USD)	Budget F (L	Original vs. Realignment Difference (%)		
real	Total	Average Monthly Burn rate	Total	Average Monthly Burn rate		
Total Budget	4,777,396	159,000	4,777,396	159,000	0	
Year I (Jun II – May I2)	2,055,588	171,000	2,023,1821	169,000	-2%	
Year 2 Jun 12 – May 13)	1,883,790	157,000	1,992,846	166,000	6%	
Year 3 (Jun – Nov 13)	838,019	140,000	761,367	127,000	-9%	

Note: 1 Year I Budget Realignment amount based on actuals.

To meet current project needs and project requirements the Year 2 (Jun 12 – May 13) budget was adjusted upward to USD 1,992,846 and monthly burn rates were increased to USD 166,000 or an increase of 6%. Year 3 (Jun 13 – Nov 13) were reduced to USD 127,000 per month or a reduction of 9% from the original budget. The Oct 12 budget realignment assumes that a reduction in staff will be required beginning in January 2013 with only a minimum staff remaining for the last several months of the Task Order. Although the overall budget remains unchanged an understanding of the distribution of LOE and cost of several unexpected activities will limit the availability of LOE to focus on other items. One category where LOE was underestimated in the original budget was the amount of effort required to support USAID project environmental clearances (see Table 4). The original estimate of expat STTA was for 128 days. The revised amount is 290 days, an increase of more than 160 days.



6.3 Tbilisi Office Project Management Team

The GMIP is managed from the Tetra Tech project office in Tbilisi under the direction of the Chief of Party (COP), Jeffrey Fredericks. The COP is the single direct point of contact for the Mission. He is the central interface among all project team members and stakeholders providing all day-to-day program management, administration and oversight functions. He is assisted by Ilia Eloshvili, Deputy Chief of Party (DCOP).

6.4 USA Home Office Support Team

The Tt Home Office team members provide management, technical and contractual support to the in-country team.

For management support the key persons are:

- Firouz Rooyani, A&E IQC Program Manager
- Brian Potvin, Task Order Manager & QA/QC
- Dean White, Corporate Responsible Office

Additional support, oversight and management is provided by the Tetra Tech home office as needed.

Home office reach back support provides a cost-effective means of efficiently accessing essential, but unique and limited engineering expertise needed for accurate and high quality project designs.

Home office support is provided through e-mail correspondence, technical consultations, and sharing of designs & issues. This eliminates the inefficient time and expense of mobilizing expertise to the field for relatively limited, project-specific engineering applications. In anticipation of these additional needs, additional home office support staff approvals have been requested through USAID in many technical areas in order to allow for flexibility and quick responses to project technical needs as they arise – including additional STTA needs.

6.5 Tbilisi Office Management/Administrative Support Team

This team supports all administrative and office operations. This includes maintaining local filing system, managing office expenditures, local procurement, translations, training coordination, public awareness, IT support, organizing transportation, etc.

6.6 Tbilisi & Regional Engineering Oversight Technical Team

The Technical Oversight team is responsible for supporting the project selection process, procurement bid document preparation, design review, and construction management QA.

Project selection. Tetra Tech will continue to use LTTA and STTA technical staff throughout the project selection phase. Tt staff have reviewed project planning & feasibility documents and conducted site visits to verify costs as well as technical and economic feasibility of proposed subprojects. These activities will continue until the final list of sub-projects has been reviewed and approved by USAID & GoG.

Procurement. Tetra Tech will also use LTTA and STTA technical staff to support the procurement phase. Tetra Tech technical staff will assist in providing support to MDF and will review bid documents that include such items as technical specifications, bill of quantities, and design drawings.

Design review. Because of the diversified and short term requirements of the design review and modification process, one option being considered is to use specialized staff from local consulting companies. The Tt Home Office will also provide a pool of experienced engineers that can be used for short duration home office assignments on a case by case basis to be approved by the COTR.

Construction Management and Quality Assurance (QA). This group is supervised by the COP. One technical Oversight Team operates out of Tbilisi and one operates out of a regional office established in Kutaisi. The Technical Engineering Team has experts to provide guidance in the technical aspects of GMIP work out in the field sites, including roads, irrigation, buildings, design, construction management, water and wastewater, and QA. These persons are full time engineers responsible for providing oversight and monitoring of construction activities. All teams are supported by expat and local STTA as required. Each contract has a contract manager. One engineer is responsible for covering a maximum of one or two contracts.

Regional Office. A Regional Office was established in Kutaisi under the direction of a Tetra Tech Regional Engineer responsible for supervising office operations as well as participating in the regional construction QA activities. There are currently two full time engineers (Including the Regional Engineer) engaged in the day to day conduct of QA monitoring. As additional contracts for IDP building rehabilitation and municipal infrastructure work begin and if funding permits an additional infrastructure engineer will be hired to support the Kutaisi office. It is assumed that the construction load at any one time for the Durable Housing Buildings could be up to 30 buildings.

6.7 Contract Administration Oversight Team:

The Contracts Administrative Oversight Team provides competence and expertise in Procurement, Finance, Law, and Document Control. The contract administrative team is led by the DCOP, supported by LTTA and STTA staff. This group is responsible for assisting in the preparation and review of all procurement documents. They also review and monitor all proposed contract changes by MDF and its contractors. The team has established and maintains a project Document Control Center.

6.8 Environmental Support Team:

The Environmental EA/PEA technical work has been led by Jim Gallup (Expat STTA Environmental specialist). Lead local STTA has been carried out by Mamuka Gvilava assisted by Mamuka Shaorshadze (Tt local Environmental, Health & Safety Specialist). The majority of the work on the environmental clearances has been completed. Capacity building and training will continue throughout the project and will largely be supported by STTA with assistance from the long term support staff.

7.1 Project Management Plan

Under a host country (HC) contract, USAID finances, but is not a party to, contractual arrangements between the HC and the supplier of goods and/or service. USAID does have approval right for the contracting process throughout the project's implementation. Tetra Tech is providing oversight for this process.

Tetra Tech's oversight and monitoring responsibilities cover project activities that include:

- Awarding contracts e.g., preparing requests for proposals, tendering, review of proposals, technical evaluation, cost evaluation, determining competitive range, selection, and contract award with a focus on ensuring that practices reflect Georgian procurement legislation and applicable USG statutory requirements, such as source and origin regulations.
- Payments for services rendered or delivered e.g., methodology of validating invoices for services rendered or delivered.
- Close out of completed projects e.g., financial and payments reconciliation, reconciliation of services delivered to design specifications, methodology to address outstanding issues.

Advice and recommendations for approval/disapproval are communicated to MDF and USAID/Georgia through written reports as required.

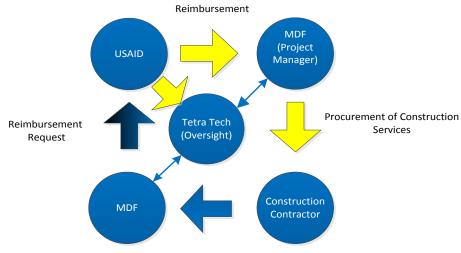


Figure 8 Project Management Relationships

Construction Services

7.2 Design/Construction Management Plan

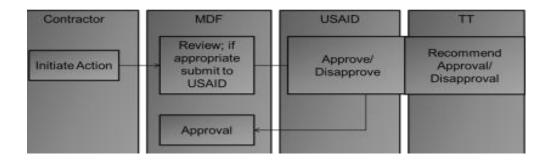
This section presents a summary of the Project Design/Construction Management Plan. The purpose of the plan is to ensure that the original contract price, schedule and scope of work are followed properly. This requires that roles and responsibilities of all participating parties are clearly defined. This is very important in dealing with changes during the work period. This plan was prepared in May 2012 and updated in July 2012 by Tetra Tech (Quality Management System – QA/QC Plan, July 2102). The Plan has been translated into the Georgian language and provided to MDF.

7.2.1 Parties

The project is managed by the main partners USAID, MDF, and Tetra Tech. The tasks and responsibilities of each party are defined by various legal documents. MDF selects contractors and

signs contracts based on competitive bidding procedures. The contractor initiates actions; MDF decides if change/correction is appropriate; MDF sends to USAID through Tetra Tech for approval; Tetra Tech reviews and recommends approval/disapproval; USAID approves/disapproves. Tetra Tech informs MDF of the decision; MDF then informs the contractor; the contractor then can proceed.

Figure 9 Approval Process



7.2.2 Types of Works

Based on the current developments and preliminary agreements between USAID and MDF, there are several types of contracts – traditional Design-Bid-Build, Design Build and direct Construction.

Design-Bid-Build (DBB) is the traditional method of contracting. A design firm is contracted to prepare the designs and tender documents. The construction contractor then is selected competitively under a separate procurement. In some cases the design contractor may also be contracted to carry out construction management services.

Design-Build (DB) contracts have been used for several of the subprojects to fast track construction efforts. The design and construction activities can proceed at the same time.

Where design drawings and costs are available with sufficient accuracy to prepare tender documents and the scope of work is more defined and does not require consideration of alternative solutions, the project will move directly to procurement for construction. Construction contractors are required to prepare detailed working drawings, good for construction, immediately after award of the contract.

7.2.3 MDF Project Management Structure

MDF is responsible the supervision of all aspects of the implementation of contracts procured under a specific loan/grant (i.e. technical supervision, contract management and financial control, payments to contractors and/or suppliers, environmental impact monitoring, etc.). MDF is performing its supervision either directly through MDF staff or with the assistance of consultants hired by MDF. Costs of MDF supervision staff is the responsibility of MDF as part of its operating costs. The costs for construction management consulting services procured by MDF will be covered by USAID Project funds.

Obligations, responsibilities, accountability and communication issues among the MDF staff involved in the design/construction management are governed by MDF's Charter and contractual agreements with its service providers. USAID Program Management Team established at MDF is responsible for overall coordination of the MDF efforts.

MDF's organizational units work on technical, financial and legal issues related to construction works undertaken under all project components in coordination with the dedicated USAID MDF Program Management Team (consisting of three persons).

MDF's project management team consists of the dedicated Core Team and Site supervision teams or site supervisors (see Figure 10). Before the commencement of works and after procurement strategy is determined, MDF presents the project specific Core and Site Specific management team configuration and structure for each contract.

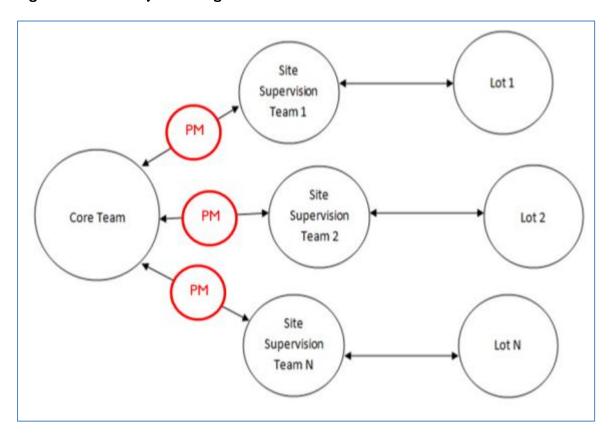


Figure 10 MDF Project Management Structure

The Core team consists of MDF staff. Heads of respective MDF units are responsible for solving technical, financial and legal issues raised during construction period. Although overall responsibility for construction management rests with management of MDF, heads of the units assign employees to work on the issues under their supervision.

USAID has the final approval right for the structure proposed and for the individuals recommended based on their qualifications. The project management team and the team members individually are supported by additional training provided by Tt before and after signing of the construction contracts, as training needs are identified.

In the bidding documents that MDF has developed for the three Components, MDF has included the concept that a Project Manager (PM), shown in red above, will be placed between the Core Team, which is primarily an MDF Home Office based management task force and each of the Site Supervision Teams. This enables MDF and its Core Team to have a singly focused representative managing the activities of each Site Supervision Team.

7.2.4 Scope Management

The scope of work is defined in the design/construction contracts. Contractors are closely monitored to ensure that works are performed in accordance with the original scope.

For the design-build and construction contracts a final scope of work is determined after an approved contractor finalizes the final working drawings. The correctness of engineering solutions proposed by a contractor, its final working drawings, and any changes in BOQs are subject to approval by MDF, USAID, and Tetra Tech.

After the scope of work and quantities of the work is determined, MDF monitors and controls the implementation process to ensure that work is executed according to the agreed scope, specifications and requirements.

MDF's site specific monitoring personnel are required to update MDF's management core team on a weekly basis about the performance of a contractor and whether its work is compliant with the original scope. Any unauthorized deviation is required to be reported to the MDF project management core team. Site teams are expected to respond to the deviation in accordance with any instructions received from MDF, however where such deviations could cause environmental, social or safety problems the site supervision teams are authorized to issue a stop order immediately pending receipt of MDF instructions.

There will be several occasions when authorized scope change may occur during design/construction. The contractor will initiate a change request and MDF will decide if the change is required. MDF will then send the request to USAID, through Tetra Tech, for approval. Tetra Tech will review and recommend approval/disapproval of the change request. USAID will then approve or disapprove such change request. Tetra Tech will inform MDF of the decision and MDF will inform the contractor.

7.2.5 Cost Management

The contract price is agreed and determined during the process when procurement is finalized and contract negotiations are conducted. After signing the contract, the Contractor prepares a monthly project cash flow projection. The MDF Core team shall monitor progress and financial performance of Contractors. If there are deviations corrective action will be taken. For design-build contracts, the preparation of a final design may result in adjusted quantities that affect the overall contract cost. A single price variation resulting in a contract amendment may be allowed based on the accepted revised price following presentation and acceptance of the Final Design.

After each period specified in the contract, a contractor will be required to prepare invoices based on the activities or quantities of works performed including and reflecting all payment retentions envisioned in contract. After submission of an invoice, MDF will review and verify the quantities, the total amount requested and unit rates applied. Before starting the payment procedures and after finalization of internal clearance, MDF will be required to provide approved invoices to USAID and Tt for their consent. USAID and Tt will not be responsible for reviewing the net quantities presented in invoice by the contractor.

7.2.6 Schedule Management

A reasonable duration for the construction period is defined in the procurement documents prepared by MDF. The bidding evaluation committee considers carefully a Contractor's ability to perform the work within the contract period. Tetra Tech conducts a due diligence review of the recommended successful bidder. USAID approves the contractor. After awarding the contract and issuing the commencement of works, the contractor is required to present a detailed program schedule within a required contract period. The schedule must be approved by MDF. Before final approval MDF submits the program to USAID/Tt for their consent.

MDF site supervision teams monitor the progress. The progress of the work is discussed at a minimum during monthly progress meetings attended by USAID and Tetra Tech representatives and, if necessary, recommendations are given on the required steps based on the existing progress. Deviations between the original and actual schedule are reported to the MDF core management team. MDF then requests the contractor to take appropriate steps to maintain the approved program schedule for the works. All revisions in the contractor's program schedule must be submitted to MDF. After receiving a request for schedule revision, MDF reviews and approves or disapproves the request. Before final approval MDF submits the program to USAID for their consent and USAID then will seek Tt's recommendation before giving or withholding its consent.

There may be other circumstances when a program schedule for the works may need to be revised. A contractor is entitled to request an extension of time. Time extensions may be approved by USAID with TT recommendation.

7.3 Quality Assurance/Quality Control Management

The purpose of Quality Assurance/Quality Control Management (QA/QC) is to ensure that all work is performed according to the standard specifications and requirements identified in the contract documents. Adjustments will be made when necessary and applicable to reflect realities of USAID and host country preferences, conditions, available materials and O&M considerations.

QA/QC during project implementation is an extremely important safeguard to meet expectations of the projects sponsors, implementers and ultimately the beneficiaries. This includes process checks and tests performed by the various concerned parties and related management systems. QA/QC should be adhered to throughout the project implementation and construction process. QA & QC are two distinct but interrelated functions. QA is defined as a system of general programmatic activities implemented to ensure QC is performed properly. QC is defined as a series of specific activities performed to ensure that a product of expected quality is delivered. The relationships within the GMIP are shown below.

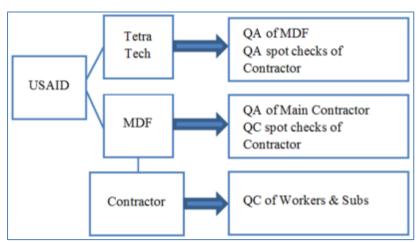


Figure 11 Top-Level QA/QC Structure

7.3.1 GMIP QA/QC Plan

As oversight engineers for USAID, Tetra Tech (Tt) is responsible for performance of Quality Assurance (QA) activities. A Quality Assurance Manual (Quality Management System – QA/QC Plan, July 2102) for oversight of the design/construction contractors has been prepared and is being implemented by Tetra Tech. This is an all-inclusive application of standards and procedures to ensure that the finished facility meets or exceeds the desired performance criteria as specified in the design and construction documents. It includes the necessary documentation to verify that all steps

in the QA process have been satisfactorily completed. The purpose of the GMIP Guidelines and QA/QC Plan is to:

- Ensure that design work is done in accordance with industry acceptable standards and USAID and Georgian government rules and regulations
- Ensure that all GMIP construction work is accurately planned and organized
- Ensure that organized procedures and instructions are issued for the performance of all GMIP construction works
- Ensure, qualified inspection results in expected and required quality
- Demonstrate through properly documented records that the work has been carried out and inspected to that required quality.

The lines of authority and communication for GMIP are presented in Figure 12.

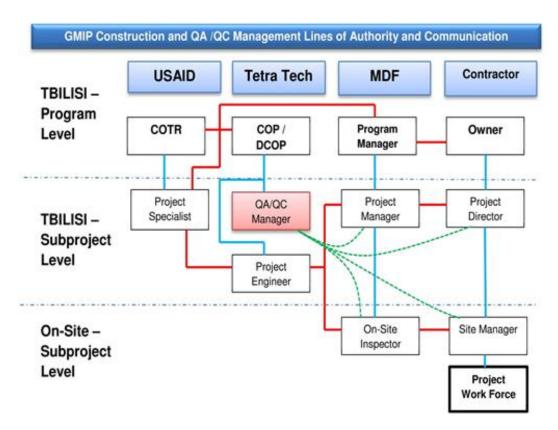


Figure 12 GMIP Lines of Authority and Communication

MDF, with technical assistance from Tetra Tech, is designated by GoG and USAID for the procurement and implementation of all works. MDF is responsible for the performance of the contractor QC activities. This includes inspecting, measuring and testing the work performed to identify any variances from the performance standards indicated in the construction plans and specifications, taking action to correct or minimize any adverse variances, and making every reasonable effort to improve performance such that all activity are in total conformance with established work standards and the Contract documents. MDF is using its own personnel to perform QC activities. It plans to complement their own personnel with external QC engineers with sufficient qualifications and experience through consulting services contracts for construction management. In case of the irrigation component MDF is using staff from the MOA Irrigation Company to assist with QC supervision activities.

In addition to the foregoing, MDF is expected to secure via its contracts with the actual builders and construction companies a large measure of self-Quality Control (QC) by those same builders and

companies. Thus, these entities will be obligated to develop and impose upon their workers a QC scheme which will perform a large part of the QC burden. In the case of the design-build contracts the contractor's designer is expected to play a key role in QC. In checking and monitoring whether its contractors, builders and companies are following through on their obligations to ensure QC, MDF will actually be conducting the first level of QA.

Contractors to MDF must submit their construction QA/QC plans for review and acceptance. The construction manager, MDF, and its technical adviser, Tetra Tech, will maintain all submittal files via a combination of a secure document filing and storage system, and a computerized document control tracking. Tt advises the construction contractor on requirements in this regard. To assist the contractors Tetra Tech has prepared of the following

- Guidelines for Mobilization Plan Evaluation (English and Georgian versions)
- Guidelines for CQC Plan Evaluation (English and Georgian versions)
- Guidelines for Method Statement Evaluation (English and Georgian versions)
- Health and Safety Plan (English versions)

QA/QC personnel perform checks and tests throughout the construction process, providing the project sponsors (and ultimately the beneficiaries) assurance that the project is being built according to specifications. General construction inspection and verification requirements include inspections, QC testing, QA testing, establishing construction acceptance criteria, compliance with handling, storage, packaging, preservation, and delivery requirements, material identification and traceability, etc. Inspections do uncover construction deficiencies. These are identified, reported and preventive and corrective action taken.

Field changes for QA/QC are limited to the construction QA/QC Plan and contractor quality control plan changes. Changes to construction processes or design plans and specifications are governed by the remedial action work plan and design change order procedures.

Document handling and retention procedures are important. On-site records are updated by the contractor and MDF on a daily basis and daily construction reports are prepared. The construction QA/QC plan requires that all construction drawings be stored and that As-Built drawings be prepared and reviewed.

The project sponsor (USAID) and beneficiary (GoG), the technical advisor (Tetra Tech) and construction manager (MDF) may initiate revisions to the construction QA/QC Plan. It may be revised whenever it becomes apparent that the construction QA/QC procedures or controls are inadequate to support work being produced in conformance with the specified quality requirements, or are deemed to be more excessive than required to support work being produced in conformance with the specified quality requirements.

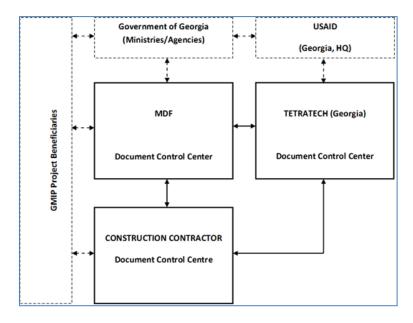
The success of the MDF QA/QC Program and the Tetra Tech QA Program relies on the submission of material samples, the construction of sample panels of work, and the observations/visual inspections by Tt's QA Engineering staff and MDF's QA/QC PM and site teams. For the design build contracts the contractor's design engineers are also expected to take a lead role in QA/QC.

7.3.2 Document Control Plan

As required in the QA/QC management system, document handling and retention procedures are being implemented for the purposes of GMIP by Tetra Tech and MDF, defining secure document filing and storage system with computerized document tracking system. Prospective external contractors are required to comply or be compatible with the requirements with regard to document control as shown in Figure 13. Document exchange rules apply when reporting to project sponsor and beneficiary governments USAID and GoG agencies. To that end, the Document Control Procedure and related tools and systems have been be defined by Tetra Tech in conjunction

with MDF. A Document & Data Control Policy manual was prepared (June 2012) and is being implemented.

Figure 13 Document and Data Management Control



7.3.3 Tetra Tech Internal QA/QC

The COP has responsibility for the overall quality of all the Tetra Tech deliverables. DCOP also reviews deliverables prior to submittal as required. Vasil Apkhazava is the Tetra Tech local QA/QC Engineer. Brian Potvin, Home Office Task Order Manager, has been designated as QA/QC design quality manager. English language translations are prepared by Maia Dvali (Translator/Interpreter). Document formatting is done by Archil Lezhava (Displaced Person Relations/Outreach). Document control is managed by Anna Urotadze (Document Control Manager).

Site Visits/Minutes of Meetings

All Tetra Tech staff are required to prepare minutes of meetings and site visit reports for all field trips.

Assignment Reports

All expat STTA are required to prepare assignment reports as part of their approved SOW. These are submitted as deliverables to USAID.

Weekly Reports

Weekly reports are required by USAID. They are prepared by DCOP, reviewed by COP and submitted to USAID. Tetra Tech Regional Office Kutaisi also prepares Weekly Reports on its activities.

Weekly Staff Meetings

Weekly staff meetings are held with the Tetra Tech Field Office staff to discuss progress, problems, and issues.

Tt Field Office Review & Approval Procedures

Tt field office review and approval procedures are outlined below:

- I. Task Assigned by COP
- 2. Task Plan prepared & approved by COP or his designee
- 3. Daily update to COP or his designee on Task progress
- 4. Weekly update with COP. If there are problems COP is informed immediately.

- 5. If field trip/site visits: Site Visit report prepared & submitted to COP.
- 6. Draft Task report submitted to COP for review
- 7. COP corrects & approves
- 8. COP sends to HO for review (key deliverables as required)
- 9. COP submits final approved deliverables to USAID with copy to MDF.

7.4 GMIP Environmental Procedures

Environmental Mitigation and Monitoring Plans (EMMPs) were developed for each GMIP activity, including housing, irrigation and roads, and mitigate potential environmental impacts, socio-economic impacts and public health and safety impacts. Each mitigation measure included monitoring indicators and reporting frequency that varied from one time during construction or operation to quarterly or monthly. EMMPs provided for mitigations in implementation contracts with inspections by MDF and GMIP (Tetra Tech). These procedures are intended to assess how well the project is doing against what was predicted when the initial environmental review was completed. Tetra Tech procedures to ensure proper contractor and MDF implementation of EMMPs include:

- For each implementation contract, assist MDF prepare a summary of mitigation measures, indicators and monitoring/reporting frequency.
- Provide training to MDF and implementation contractors on EMMP mitigations, what they
 mean and how to implement and report on EMMP requirements.
- Using mitigation summaries, assist MDF and implementation contractors prepare quarterly compliance assessment reports indicating whether mitigation measures are being implemented properly. Identify measures with implementation problems and steps planned to address deficiencies.
- Conduct annual audits of EMMP implementation under GMIP contracts. Include site
 inspections and assessment of implementation with documentation and pictures. Identify
 measures completed and those with problems needing modification of mitigation measure or
 development of new measures. Include environmental audits as part of contract and project
 results reporting.
- Provide end-of-contract report on EMMP implementation. Describe measures completed, impacts and benefits, and lessons learned. Provide recommendations including changes for future mitigations. Provide answers to EMMP questions such as: How effective were mitigation measures? Were original project assumptions correct? How can future activities be improved?

8. REPORTS AND DELIVERABLES

All reports and other deliverables will be in the English language, unless otherwise specified by the COR. The list of deliverables subject to adjustment by the COR is given below:

Table 12 Reports and Deliverables (October 2012 – September 2013)

	Report	Due Date
C.	Bi-Weekly Meetings and	Bi-weekly or more frequently if necessary
	Reporting	
D.	Project Selection Reports	As-needed basis
E.	Quarterly Progress Reports	Within 10 days of the end of fiscal year quarter and will follow the U.S.
		Government USG reporting periods which begin October 1.
		1/10/13; 4/10/13; 7/10/13
F.	Environmental Scoping	Revise Oni Water Supply after BEO review (Sep 12)
	Statements	
G.	Programmatic Environmental	Component I Municipal Infrastructure: Oni Water Supply (Oct 12)
	Assessment PEA/EA	Component I Municipal Infrastructure: Dusheti Flood Protection (Nov
		12)
H.	Performance Monitoring Plan	Update Annually
	PMP	
I.	Annual Work Plans	N/A
J.	Annual Report	30 days after the end of the fiscal year. Due Nov 1, 2012
K.	End of Activity Report	At the end of the contract (Nov 13)
L.	Success Stories	At the direction of USAID/Georgia.

- C. Bi-Weekly Meetings and Reporting. Twice weekly meetings are being held between USAID/MDF/Tetra Tech. Other partners such as MRA also attend. The purpose of the meetings is to present/discuss progress, identify opportunities for program improvement, and resolve problems as required. Minutes of meeting are prepared by MDF. Tetra Tech also prepares and submits a weekly status report to USAID.
- D. Project Selection Reports. Tt submits written reports describing the technical and other impact assessments of proposed infrastructure projects. These reports are developed and submitted on an as-needed basis and will communicate Tt's expert advice and opinion regarding each project's technical feasibility, reasonableness, and cost/benefit and provide MDF and USAID with information to carry out a desktop review and final approval for proposed projects.
- E. Quarterly Progress Reports. Tt submits quarterly progress reports to USAID within 10 days of the end of fiscal year quarter and following the U.S. Government USG reporting periods which begin October 1. These reports summarize progress of the major activities during the period of performance, indicating any problems encountered and steps taken to resolve them or proposing remedial actions as appropriate. It informs the CO and COR of any problems, delays, or adverse conditions that materially impair Tt's ability to meet the requirements of the contract.
- F. Environmental Scoping Statements/EAs. Environmental scoping statements for all components of this project were to be carried out under separate local contracts and were expected to be completed during Tt's startup phase. These scoping reports were required in the implementation of the Program Environmental Assessment PEA for the IDP component and site specific EAs for the municipal infrastructure and irrigation components. The quality of the local scoping statements was limited and Tt is preparing all scoping statements.
- G. Programmatic Environmental Assessment PEA/EAs. Tt prepared the PEA for Component 3 IDP Durable Housing Project and several updates which were approved by the Mission and Bureau

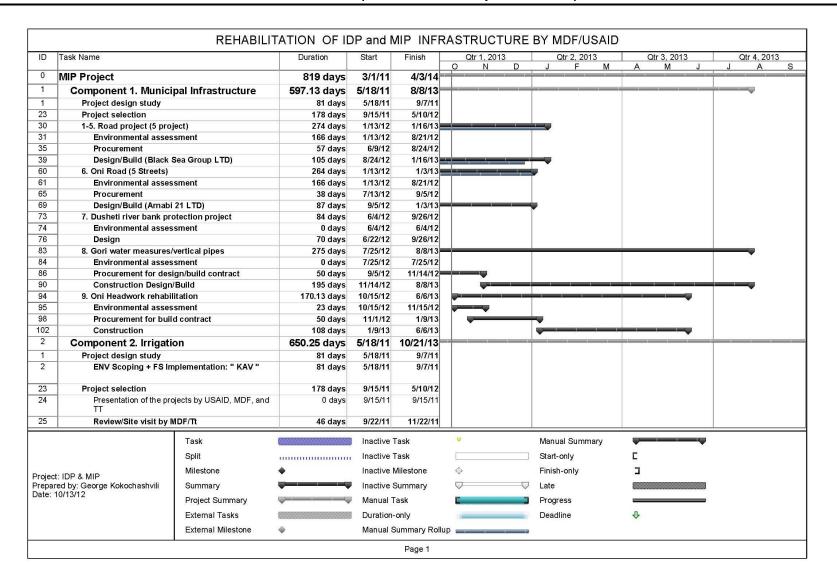
Environmental Officers. EAs have been required for the municipal infrastructure and irrigation components. These have been prepared by Tetra Tech and approved by the Mission and Bureau Environmental Officers on an as needed basis.

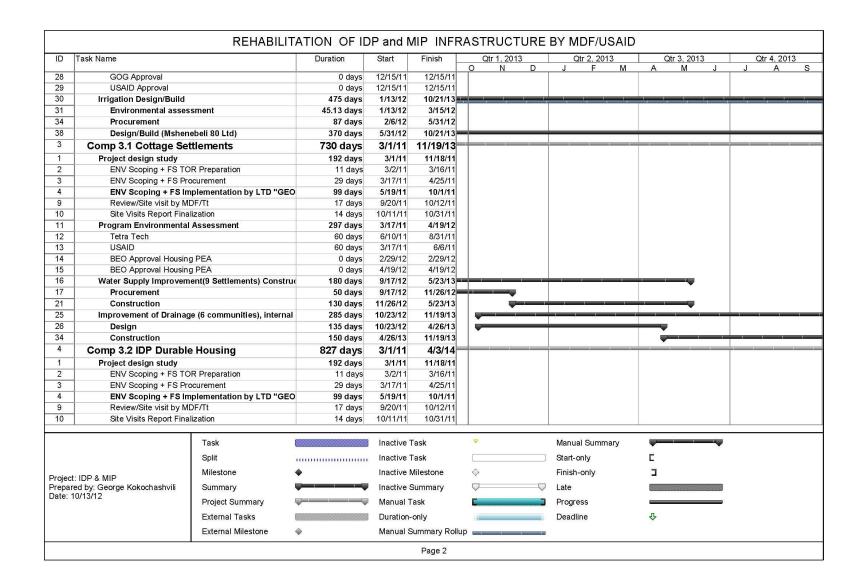
- H. Performance Monitoring Plan. In close coordination with USAID and MDF, Tt developed and submitted to USAID a Performance Monitoring Plan (PMP). The PMP identifies the start date of each task and the expected completion date. Critical path timelines with milestones have be established and reported on, identifying relevant sub-activities needed to achieve successful completion. The PMP reports progress against USAID established indicators over the life of the activity these indicators were provided to the Tt by USAID. MDF is updating the PMP in their Annual/Semiannual Progress reports.
- I. Annual Work Plans. Tt submits annual work plans that detail the work to be accomplished during the upcoming year. The work plan is to be submitted no less than 30 days prior to the end of each fiscal year. Annual work plans may be revised on an occasional basis, as needed, to reflect project changes on the ground and with the concurrence of the COR.
- J. Annual Report. Tt submits an annual report for each Fiscal Year combining the activities of all four quarters a separate fourth quarter report is not necessary and providing an assessment towards achieving the annual objectives set forth in the annual work plans, including information for USAID performance indicators PMP. This report is due 30 days after the end of the fiscal year.

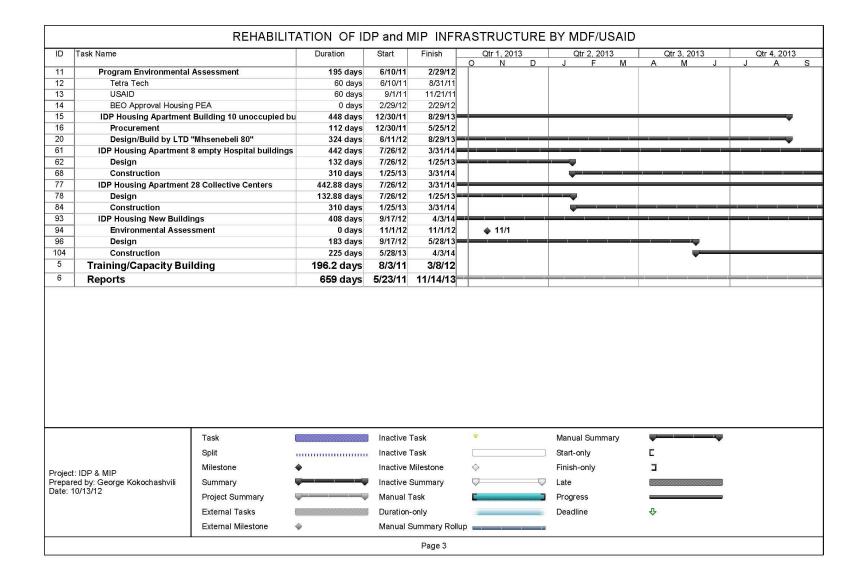
K. End of Activity Report. At the end of the contract, Tetra Tech will prepare a final project Report that contains the following information:

- Specific objectives of the program;
- Activities undertaken to achieve program objectives;
- Results achieved by objective, including life-of-program reporting according to the performance monitoring plan;
- Actions taken to leverage resources and to ensure the continuation and sustainability of
- program objectives and the effectiveness of these actions;
- Recommendations regarding unfinished work and/or program continuation; and
- Lessons learned over the course of the program.
- L. Success Stories. Tt will prepare success stories and other outreach materials at the direction of USAID/Georgia.

ANNEXI: TETRA TECH IMPLEMENTATION SCHEDULE (October 2012 - September 2013)







ANNEX 2: LIST OF KEY PROJECT STAFF

			ngt/ min	Engine ering			Contract Admin				Other						
No		Project Management	Project Admin/Support	Roads	Flood Protection	Building Construction	Water & Sanitation	rrigation	Construction Management	hspection	Procurement	Finance	Monitoring	Codes & Regulation	Environmental Assessment	Training	Public Awereness
	Project Office Management Team																
1	Jeffrey Fredericka, Chief of Party, LTTA	Х	Х	_	х		х	Х	_X	Х	Х		Х		_X	Х	X
2	Ilia Eloshvili, DCOP, LTTA	Х	Х	Х					Х		Х	Х	Х			х	X
_	Project Office Admin/Procurement										.,	_				\vdash	
-	George Nizharadze, Office Operational/Procurement Manager, LTTA		X								Х						X
_	A rchil Lezhava, Training/Outreach/Communications, LTTA	\vdash	Х					\vdash			\vdash					Х	X
-	Maia Dvali, Translat orfinterpreter, LTTA	\vdash						\vdash			Н		Х	\vdash	_X		X
- 6	Sasha Khachaturov, IT Specialist, STTA		Х	_				\vdash			\vdash	_				Х	\vdash
	Engineering Over Site										Н						\vdash
	Givi Varduashviti, Senior Civil Engineer, LTTA			Х	Х		х		Х	х	Ш		Х		_	Х	\vdash
8				X	Х	Х		Ш	X		Ш		Х			Х	
9	OtarMaghalashvi, Irrigation Engineer, LTTA					х		Х		Х			Х			Х	\vdash
10	TBD, Water Waste Water Engineer, STTA				х		х		Х	х	Ш					Х	
11	Vaail Alphkhazava, QA/QC Engineer, LTTA					х			Х	х	Ш		Х			Х	
12	Koba Tairamuna , Regional Engineer (Kutaia) į LTTA	х				х			х	х			Х			х	
13	A vtandil Baramia, Regional Construction Engineer (Kutaisi)					х			х	х			х			х	
14	TBD, Regional Construction Engineer (Kutaia)					х			х	х			х			х	
15	TBD, Construction Engineer, Expat STTA			х	х		х			х			х			х	
16	James Hayden, Senior Construction Advisor, Expat STTA					х			х	х			х			х	
	Contract Administration Over Site																
17	Irakli Kakulia, Paralegal/Licensing & Permits, LTTA													х			
18	Anna Urotadze, DCC Specialist, LTTA		х										х			х	
19	Derma Sakhitkhutsishvili, Finance Specialist, STTA											х					
	Environmental/Other Technical Support																Г
20	James Gallup, Environmental Specialist, Expat STTA	х					х						х	х	х	х	
21	Mamuka Gvilava, Environmental Specialist, STTA									х	х		х	х	х	х	х
22	Mamuka Shaoishadze, Environmental Technician, LTTA									х			х			х	
	Home Office Support																
23	Firouz Rooyani, A&E IQC Program Manager, HO	х							х		х	х	х			х	х
	Brian Potvin, CIG Task Order Manager & QA/QC, HO	х				х	x		x	х			x			х	x
-	Laura A. Corbin, Contract Administrator	x	х								х						
-	Brian Bernis, CIG Project Finance Administrator, HO		х									х					Г
	Susan Dellarra, Project Analyst, CIG, HO		х														\vdash
-	David J. Casella, ES Director, Contracts and Legal, STTA/HO	x									х	х		х		х	\vdash
-	Stephanie Coulis, Contrada Specialist	x	х					Н			x	^		^			\vdash
-	David Sharashenidze, ES Home Office C continut or, HO	x									n		х				\vdash
	C hristina G ogsadze, ES Accountant_Tbilisi, HO	Ĥ						\vdash		\vdash	Н	х	^			\vdash	
-	Shelly Rice, EM Subcontract Specialist, HO	\vdash										^	~	\vdash		\vdash	
	Renee Valentino, EM Contract Manager, HO	\vdash		_				\vdash			X		x	х		_	
22	Total	\vdash		4	5	8	6	\vdash		\vdash	10	6	21	5	4	22	8

ANNEX 3: YEAR 2 LEVEL OF EFFORT

Name	Title	Days
EM Home Office Support		
Shelley Rice	Procurement/Subcontracts Manager Sr.	7
Renee Valentino	Contracts/FM Sr.	20
Subtotal EM Home Office Support		27
Short-Term U.S. Tetra Tech RAI Home Office Employees		
Firouz Rooyani	IDIQ Contract Manager	21
Brian Potvin	Task Order Manager	25
Tom Abdella	Sr. Contract Administrator	2
Susan DeMarre	Project Analyst	5
Brian Bemis	Project Finance Administrator	23
Subtotal Short-Term U.S. Tetra Tech RAI Home Office Employees		76
Long-Term U.S./TCN Employees		
Jeff Fredericks	Chief of Party	260
Short-Term U.S./TCN Employees		
TBD	Infrastructure Engineer	25
TBD	Senior Infrastructure Engineer	20
Subtotal Short-Term U.S./TCN Employees	3	45
RAI Subcontractors		
James Gallup	Environmental Specialist	25
TBD	Construction Advisor	110
Subtotal RAI Subcontractors		135
ES Home Office Support		
David Sharashenidze	Home Office Coordinator	10
Stephanie Coulis	Contracts Specialist	10
Subtotal ES Office Support	· ·	20
CCNs Consultants Long Term	_	
Givi Varduashvili	Senior Civil Eng.	218
Vasil Aphkhazava	QA/QC Engineer	218
Koba Tsiramuna	Regional Eng.	218
Mamuka Shaorshadze	Environmental, Health & Safety Specialist	143
Archil Lezhava	Program Specialist	98
Avtandil Baramia	Regional Construction Eng.	218
Ilia Eloshvili	Infrastructure Manager	260
Teimuraz Levanishvili	Housing Rehab Mgr.	218
Irakli Kakulia	Paralegal/Licensing	98
Otar Maghalashvili	Irrigation Engineer	218
Anna Urotadze	Document Control Manager	218
Christina Gogsadze	Financial Administrator	100
George Nizharadze	Office Administrator	260
Subtotal Long Term		2486
CCNs Consultants Short Term		
Mamuka Gvilava	Environmental Specialist	125
Demna Sakhltkhutsishvili	Financial Management	125
Domina Oakintaratsisriviii	Specialist	30
Akaki Subitidze	Roads Engineer	87
Subtotal Short Term CCN Labor		242

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